Oil, Paint and Drug Reporter

THE CHEMICAL MARKET AUTHORITY

May 11, 1959

UV Absorbers Special Report

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Oil, Paint and Drug Reporter

Vol. 175 No. 20 30 Church St., New York 7, N.Y. May 11, 1959

THE UV ABSORBER MARKET

Whither Benzophenones, Benzotriazoles?

	1958	1960
*Cellulosics	58,000 lbs.	75,000 lbs.
Vinyls	53,000 lbs.	100,000 lbs.
Polyesters	50,000 lbs.	150,000 lbs.
Polystyrene	18,000 lbs.	25,000 lbs.
Polyolefins	—	10,000 lbs.
Acrylics	3,000 lbs.	7,000 lbs.
Nitrocellulose	5,000 lbs.	
Half-Second Butyrate	3,500 lbs.	33,000 lbs.
Miscellanous (incl. exports)	9,500 lbs.	
Total	200,000 lbs.	400,000 lbs.

*Some 360,000 pounds of salol were used in cellulosics for light-absorptive purposes in 1958. Another 120,000 pounds of this phenol aromatic ester went into other plastics for the same reason.

UV Absorbers Light the Way To Industrial Chemical Market Totaling $10 Million by 1965

Sales of industrial ultraviolet absorbers of the substituted benzophenone-benzotriazole type will reach $10 million in 1965 — ten times what they were in 1958. This is the consensus of an industry which believes it has hitched its wagon to a star. Ultraviolet absorbers sales by 1960 should double their 1958 record, many believe. This is all the more spectacular when you realize that five years ago, there was practically no market at all for these materials. Yet, you'll hear some executives say they can't understand why the market hasn't developed faster.

OPD Special Report

There's sound reason for this impatience. The fact is that in the plastics field alone, polyethylene, vinyl, polystyrene and polyester resins could have used an estimated 1.4 million pounds of ultraviolet absorbers last year.

Market Far From Realized

This is a far cry from the actual sales of an estimated 200,000 pounds during 1958—about half of which went into non-plastics use.

It's hard to figure why this market has not been more deeply penetrated, since UV absorbers of the substituted benzophenone type have been under development since 1946, and have been offered commercially since 1953. However, some obstacles to swift acceptance by consumers are obvious:

- It takes, on the average, about seven years for a product of this type to be accepted by a consuming industry: Two years of producer development; two to three years of consumer testing, and the balance of the period for the material to gain widespread use.
- Long before the substituted benzophenones were thought of, salol was firmly entrenched as an industrial UV absorber. Last year, in fact, cellulosic materials alone used an estimated 360,000 pounds—almost twice the total poundage of the benzophenone-type stabilizers.

Furthermore, some 120,000 pounds of salol went into plastic materials other than cellulosics. While it is conceded by producers and consumers alike that the material does not do everything the more sophisticated benzophenones can do, salol has some advantages.

For one thing, it's cheaper: around $1.20 per pound for the NF grade as compared

—Continued on page 44

UV ABSORBERS: SALES OUTLOOK

1965	$10 million
1960	$2 million
1958	$1 million
1953	—

Above sales figures are for industrial ultraviolet absorbers of the substituted benzophenone-benzotriazole type.

Butter, Oleo Men Now Bedfellows As They Attack Coaltar Color Ban

Midwest butter and oleomargarine producers—traditional enemies turned bedfellows—are taking a leaf from the notebook of the orange growers: they're appealing to congress to suspend the ban on coaltar yellows 1, 2, 3 and 4. The four colors went off Food and Drug Administration's certification list last Thursday (May 7) and will remain off until the proposed general bill for regulating color additives is enacted. Rep. Thomas B. Curtis of Missouri is spearheading the move by the butter and oleo men with a new bill.

SALES CHIEF: Charles F. Martin, appointed director of sales for Western Condensing Company, Appleton, Wis. He succeeds Douglass L. Mann, who has advanced to an executive post with the parent company, Foremost Dairies.

The measure (HR 6852) was dropped into the congressional hopper last week and sent on to the house interstate commerce committee for consideration. There was no immediate indication from the committee when action might be expected.

Bumped by Long-Standing Order

FD&C yellows 3 and 4, which were used chiefly by the butter and oleo producers, went off the certification list of the FDA, along with yellows 1 and 2, by reason of a long-standing order put into force early this year after the supreme court ruled in the Florida Citrus Exchange case to uphold the contention of the FDA that it could not certify any coaltar color unless it is completely harmless.

The situation is similar to that which faced the orange growers several years back, when FDA withdrew certification of FD&C red Number 32 after it had been in use for many years for tinting oranges.

After losing out in the courts, the industry appealed to congress for relief, and a bill was passed recently permitting the use of a less hazardous color, citrus red No. 2, under tolerance rules laid down by the agency.

Rep. Curtis, who sponsored a general color additives regulation bill for industry in congress last year, but which failed of enactment, cited the release granted to the orange growers as a precedent for similar action in behalf of the edible fats producers.

"Of the four yellow food colors delisted," he said, "yellow numbers 1 and 2 are water-soluble and are of no concern here because there are other water-soluble yellows available.

"What we are concerned with are the fat-soluble yellows No. 3 and 4, since no appropriate substitute fat-soluble coloring is available. Yellow numbers 3 and 4 are extremely important to producers of

—Continued on page 41

Revlon Now Giving Up On Purchase of Schering

Revlon, Inc., balked in its efforts to pick up a controlling interest in Schering Corporation, Bloomfield, N. J., has begun to pull out. Late last week the New York firm disclosed sale of some 128,739 shares of Schering stock, which cuts its holdings to something like 100,000 shares.

Revlon picked up its first interest in Schering in 1957 (about 9 percent) in a purchase described by the firm as "an investment." Of last week's sale, a Revlon spokesman had this to say: "We decided the price looked good."

Agrico Goes to Exchange For $19 Million Expansion

American Agricultural Chemical Company, New York, active in planning expansions in the forepart of this year, has gone to Wall Street in order to raise $19 million to back up its plans.

Public offerings of 216,093 shares of common stock were made last week by a group of investment firms headed by Hayden, Stone & Co. The stock is priced at $33.50 a share.

It is understood that Agrico will use at least part of the proceeds of the sale to build in Sleepy Eye, Minn., (OPD, 3/23/59), and a $2 million sodium tripolyphosphate plant in Carteret, N. J., (OPD, 2/2/59).

Isocyanates Facility Completed by Carwin

Carwin Company, New Haven, Conn., has completed its second manufacturing unit to double production capacity for the variety of monoisocyanates, di-isocyanates and polyisocyanates pioneered by Carwin.

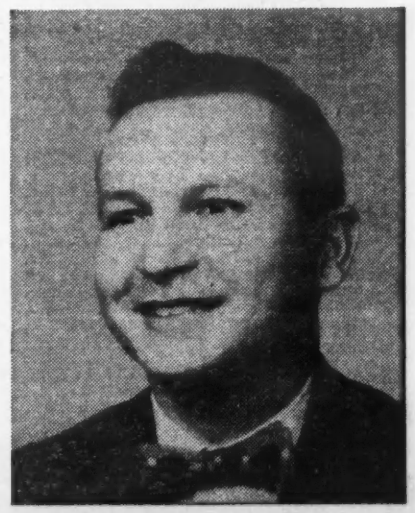
As a result of this added capacity Carwin has announced commercial availability of ethyl isocyanate and phenyl isocyanate.

The company also has plans for offering aliphatic di-isocyanates and higher molecular weight aliphatic monoisocyanates in addition to its present tonnage products, n-butyl- and n-propylisocyanate, tolidine di-isocyanate, dianisidine di-isocyanate, and PAPI (polymethylene polyphenylisocyanate).

The availability of the specialty monoisocyanate products has made possible a number of new pharmaceutical syntheses by the unambiguous isocyanate route, and the commercialization of several fiber

—Continued on page 43

RESEARCH HEAD: Dr. Charles G. Goebel, promoted to research director by Emery Industries, Inc., Cincinnati, Ohio. He will manage expanding research on fatty acids and their derivatives and the dry cleaning research of the Sanitone research section.



Chemical Price Adjusting Bill Threatens Again

Chemical producers are on notice that their right to lower prices discriminantly to protect themselves against raids on their customer lists by competitors is being threatened again.

S 11 passed its first milestone last week when the Kefauver monopoly subcommittee moved it on to the full senate judiciary committee for approval. The subcommittee reported it without recommendation.

The full senate judiciary committee is scheduled to meet today. While this measure has been placed on the agenda, it is not likely that it will be reached at this meeting.

And if last session's history of congress on the bill is repeated, it may be a long time before it is taken up by the committee.

The bill was the subject of a tug of war for months between proponents and opponents in the committee and, when finally reported at the tail end of the session, it had been cut back to apply only to the food, drug and cosmetic industries.

Every effort will be made by its critics to emasculate it again before it gets out of committee.

The subcommittee's action came after it had reported two other antitrust bills to the full committee for favorable action. One is the pre-merger notification bill that has been pending since the beginning of the session, and the other is a bill sought by the Department of Justice, giving it the

—Continued on page 43

Agriculture Chemists Seen Men To Lick Surplus Grain Problem

The agricultural chemists may yet be the men to lick the problem of surplus grains in this country. So thinks George W. Irving, jr., a highly-placed official in the Department of Agriculture. Mr. Irving believes that utilization research is the key—and he expects the agricultural chemists to turn it. Both here and abroad, he says, they are already stepping up their efforts in this direction. So far they can see many promising outlets for the grains as raw materials in industry.

Mr. Irving—whose job is deputy administrator of USDA's Agricultural Research Service—told of the agricultural chemist's increasing values last week at the annual meeting of the American Association of Cereal Chemists in Washington, D.C.

Here Are Some Developments

Some of the more promising developments in industrial uses of cereal grains currently under study, Mr. Irving said, are these:

- Dialdehyde starches are now being produced in pilot-plant quantities by industry. USDA research now is confined largely to basic and applied studies on properties, derivatives and uses.
- Dicarboxyl starch is an example of a derivative that is obtained by hypochlorite oxidation of cross-linked dialdehyde starch; this new product has many of the properties of natural gums and shows promise for use in the manufacture of paper, paints, textiles, drilling-muds, toiletries, cosmetics and food products.
- Reductones from glucose offer promise for use as antioxidants in industrial products; an economical process for reacting wheat flour with such agents as epoxides and acrylonitrile produces a product of industrial possibilities.
- Fermentative conversion of cereals has resulted in a new phosphorylated mannan with possibilities for use in tobacco, pharmaceuticals, cosmetics and foods. This is only the first of a series of new microbial polysaccharides to be investigated. The fermentative process for producing beta-carotene is receiving considerable interest from industry.

Dr. Fred Tanner, of Chas. Pfizer & Co., also liked the idea of chemicals from

—Continued on page 43

DuPont Gets Okay To Sell Residences

The Securities & Exchange Commission is going to let E. I. duPont de Nemours & Co. sell residential property to employees or purchase property from them.

The Wilmington, Del., company has found it necessary from time to time to buy property near its plants for rental to employees, but it had to ask for SEC approval to sell because duPont is a subsidiary of Christiana Securities Company, a registered investment concern (OPD, 4/27/59).

Nopco Chemical Buys Jacques Wolf for Cash

Nopco Chemical Company, Newark, N. J., has acquired all the capital stock of Jacques Wolf & Co., Clifton, N. J., in a cash transaction, that follows a month or more of negotiation (OPD, 4/6/59).

The purchase price—more than $3 million—did not exceed the net worth of Jacques Wolf at the time of purchase, says Nopco. Wolf's annual volume of sales has been between $5-$6 million for the past five years.

Nopco will operate Jacques Wolf as a wholly-owned subsidiary, retaining its present staff and sales force. G. J. Desmond and Arnold Pfister, Wolf officers, will continue to serve in their present capacities, while G. Daniel Davis, Nopco executive vice-president, becomes president of Jacques Wolf.

The new officers of Wolf, along with Mr. Davis, are Nopco vice-presidents Harry A. Batley and Harold A. Swanson,

—Continued on page 59

'Monodyne,' Active Yeast, Available in Lab Quantities

Red Star Yeast & Products Company, Milwaukee, Wis., is marketing an active yeast, "Monodyne" (torulopsis monosa), in laboratory quantities.

Available for experimental work as press-cake, which may be kept under refrigeration for a period of two or three weeks without losing potency, the firm says the yeast has the unique property of fermenting only monosaccharides to the exclusion of disaccharides.

Chemical Foreign Trade Is Heading for a Record

Foreign trade in chemicals and related products is making a remarkable comeback from the business setbacks of 1958. In fact, it's moving ahead to probable new records this year. That's the word from the Bureau of Census.

Total trade both ways during the first three months of 1959 reached $436.2 million, according to preliminary Census estimates. This is an increase of $35.1 million over 1958 and is the highest first quarter in history.

Gains were registered over last year on both sides of the ledger. In each succeeding month, the value of exports and imports increased over the preceding month and ran substantially ahead of the

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The Week's Price Changes

Casein, Clove Leaf Oil, Congo Copal Gum, Lead Advanced. b-Carotene, Phenol, Spearmint Oil, Tankage Reduced.

Prices Advanced

Beeswax, refd., 2c. to 3c. per lb. (p. 55).
Casein, imp., Arg., ½c. per lb. (p. 58).
Castor oil, Brazilian, ¼c. per lb. (p. 55).
Clove leaf oil, 10c. per lb. (p. 57).
Coconut oil, crude, N. Y., ½c. per lb. (p. 55).
Congo Copal gum, No. 3, ¾c. per lb. (p. 58).
Copra, $5 per ton.
Corn oil, crude, ⅝c. per lb. (p. 55).
Refd., ⅝c. per lb.
Cottonseed oil, crude, ½c. per lb. (p. 55).
Refd., ⅝c. per lb.

Prices Reduced

Anise oil, USP, 25c. per lb. (p. 57).
Balsam, Peru, USP, 15c. per lb. (p. 57).
Benzyl isoeugenol, 35c. per lb. (p. 57).
Cardamom oil, NF, $3 per lb. (p. 57).
b-Carotene, 5c. per gram. (p. 49).
Chenopodium oil, NF, 20c. per lb. (p. 57).
Clove bud oil, 15c. per lb. (p. 57).
Cottonseed meal, $1 per ton (p. 55).
Dammar gum, Batavia, Batu, bold, ¾c. per lb. (p. 58).
Dried blood, N. Y., Chicago, 25c. per unit-ton (p. 54).
Lard, cash, ¼c. per lb. (p. 55).
Lead, ½c. per lb. (p. 38).
Palm oil, dms., ½c. per lb. (p. 55).
tanks, ¼c. per lb.
Peanut meal, $3 per ton (p. 55).
Peanut oil, crude, ¼c. per lb. (p. 55).
Refd., ¼c. per lb.
Phenol, USP, 1c. per lb. (p. 46).
Sage oil, Dalmatian, 10c. per lb. (p. 57).
Soybean oil, crude, ¼c. per lb. (p. 55).
Refd., ¼c. per lb.
Spearmint oil, NF, 50c. per lb. (p. 57).
Tankage, N. Y., Chicago, 25c. per unit-ton (p. 54).
Tin, ⅜c. per lb. (p. 38).
1,1,1-Trichloroethane, 1½c per lb. (p. 53).

OPD Price Index

THE OIL, PAINT AND DRUG REPORTER'S relative record of prices of chemicals and related materials is currently as follows:

(100=1949 average)

May 8, 1959	May 1, 1959	May 9, 1958
110.64	110.84	109.92

Antibiotics Becoming Enemies?

Pharmaceutical makers were warned last week: antibiotic research must be crash-programmed ahead. The need for action—which is urgent—arises out of current findings in hospitals that antibiotics, while saving man from major killers, are at one and the same time laying him open to the ravages of germs once thought harmless. In other words, 'wonder drugs' such as sulfanilamide, penicillin, streptomycin and others, are breaking down man's natural immunity.

So researchers who came up with the original antibiotics must now turn their energies and knowledge in the direction of the new enemy.

Dr. Maxwell Finland, researcher at the Harvard Medical School, speaking at the annual meeting of the Association of American Physicians, gave his warning while relating the findings he and his colleagues have made.

Dr. Finland, reporting on a hospital situation described as "alarming," told his audience that one of the first intimations of the present trend was bared when the staphylococcus—effectively combatted by antibiotics in the early days of the "wonder drug" era—started proving resistant to most drugs and today is killing more drugs than ever before.

But this isn't the worst of what is taking place. Dr. Finland found even more ominous the rousing of "sleeping

—Continued on page 59

IN TECHNICAL POST: Dr. Arthur B. Steele, appointed director of the technical service laboratory of Union Carbide Chemicals Company, New York, a division of Union Carbide Corporation.

India Fertilizer Installation To Be Finished in Mid-'60

The Nanagal fertilizer and heavy-water project in Punjab, India, one of three large fertilizer plants in the public sector called for by the Second Plan, is now expected to be completed by the middle of 1960, according to the *Economic Newsletter* of the Indian Embassy.

The facility is designed to produce 70,000 to 80,000 tons of nitrogen in the form of a new fertilizer called nitrolimestone annually along with some 350,000 tons of ammonium sulfate and about 14.5 tons of heavy water.

Ferro Is Expanding Unit

The board of directors of Ferro Corporation, Cleveland, Ohio, has okayed a $700,000 expansion of the company's fiber glass producing facilities in Nashville, Tenn. According to the firm, this is the second major expansion of this plant to be approved in less than a year.

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NEW PRESIDENT: Jeffrey W. Meyer, the new president of Wilson & Geo. Meyer & Co., San Francisco. He succeeds Wilson Meyer, who has become board chairman.

Labor News Big In Chemical Trade

Labor news was big news on the chemical front last week. First affected was the coaltar industry which had more than a passing interest in what was going on in steel. The news that interested the coaltar people was that United States Steel Corporation had proposed to the United Steelworkers of America a one-year extension of the company's present contract.

Here were some other developments:

• At Niagara Falls, N.Y., production and maintenance workers struck at two new plants of Olin Mathieson Chemical Corporation that were making high-energy fuel for the Department of Defense. The union is negotiating for its first contract at the plants.

• E. R. Squibb & Sons, a division of Olin Mathieson Chemical Corporation, had its labor troubles, too. Twenty-three hundred employees went on strike at Brooklyn, N.Y., and New Brunswick, N.J. The walkout was staged by members of the Oil, Chemical and Atomic Workers International Union.

• Merck & Co., Rahway, N.J., made news when it agreed with OCAW on new wage rates amounting to an average in-

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USI Polyethylene Facility Runs Full Tilt in 6 Weeks

US Industrial Chemicals Company, a division of National Distillers & Chemical Corporation, has achieved full-capacity operation at its new polyethylene plant in Houston, Tex.—just six weeks after the start-up of the facility.

According to William Rader, USI's manager of polyethylene production, quality of the product at this early date has exceeded expectations, and a significant proportion of the output is already meeting highly critical film-grade specifications.

The new plant gives USI a total yearly production capacity of 175 million pounds of high pressure polyethylene. Steps are already under way to double the capacity of the new Houston plant by the third quarter of 1960. This will up USI's total polyethylene capacity to 250 million pounds.

Meanwhile, USI has opened up a new "Morea" liquid feed premix plant at Tuscola, Ill. The new unit is located on the site of the firm's $100 million petrochemical and agricultural chemical facilities.

Toilet Goods People Confused By Import Infringement Rules And Everybody Else Is Too

Trademark enforcement under the tariff act—as it pertains to protecting American owners against infringement by imports—is becoming more confusing every minute for the toilet goods industry, and for a lot of others to boot. On the one hand, legislation is being drawn up by the government that would deny to American affiliates of foreign concerns the right to trademark protection against infringing imports. But, on the other hand, regulations now in force by the Bureau of Customs are being revised in a way that could give these concerns greater protection against infringing imports.

What appears to be a government situation that has one group tugging one way while another group is tugging the other is the aftermath of a policy decision made several years back.

That decision said American concerns with related companies abroad cannot invoke the protection of section 526 of the tariff act of 1930 for their trademarked articles to keep the similarly marked products of their affiliates out of the country.

Three Perfume Houses Fight Decision

When the policy decision was put into operation, it was challenged in the courts by the American affiliates of three foreign perfume producers—Guerlain, Inc.; Parfums Corday, Inc., and Lanvin Perfume.

The government was on the winning side of the issue in the lower court, but when the companies appealed to the Supreme Court of the United States and won that court's assent to consider the case, the government changed its mind and asked the court to remand the case so that it could be dismissed. The supreme court agreed.

The government explained that as a matter of policy it was decided that this question "should not be dealt with through attempted utilization of judicial remedies under the antitrust laws" but should be a matter for congressional consideration.

The Department of Justice promised that a bill would be submitted at this session of congress designed to "make it clear that the trademark protection is not available to prohibit the importation of a product legitimately marked by an affiliate of the trademark owner."

Each of the several departments concerned with the question—Justice, Commerce, State, Treasury and the Federal Trade Commission—have been working on the bill ever since without reaching an agreement on the details.

But now a new element has been added to compound an already confused sit-

—Continued on page 41

Freeport Sulphur Purchase Of Gov't Plant Under Fire

Still in an investigating mood, congress has been looking over a two-year-old contract the government signed with Freeport Sulphur Company and it doesn't seem to like what it sees.

Congressional subcommittee hearings open this morning to deal with the sale of an experimental metals plant to Freeport for "a fraction" of the $6 million cost. The investigating unit will also look at a commitment made at the same time for a purchase of cobalt and nickel from Freeport that might cost the government an additional $6 million.

According to a spokesman for the subcommittee, the experimental plant was built by the government in 1934 for Freeport's use. The experiments were completed in 1956 and last month the plant was sold to Freeport for $236,455.

Charles A. Wright, president of Freeport, said that the firm's contract "will stand up under any fair analysis."

TAKES OVER SALES POST: S. R. Clement, named to the newly-created post of director of sales in charge of customer relations for the inorganic chemicals division of Monsanto Chemical Company, St. Louis, Mo.

DuPont Will Make More Polyester Film

E. I. duPont de Nemours & Co. is ready to start construction of a second plant which will almost double the Wilmington, Del., company's capacity for making "Mylar" polyester film.

The new unit will be built near Florence, S. C., at a cost of almost $20 million. Construction will begin next month, with completion expected early in 1961.

The Florence unit will provide a second source of supply for "Mylar" convenient to eastern markets. Commercial production of the film started at the company's Circleville, Ohio, plant in 1954. Since that time production facilities at Circleville have been enlarged, with the latest major expansion scheduled to come on stream early in 1960.

"Mylar" was developed by duPont, and the company put nearly $24 million into research, development and operating investment before the Circleville plant started commercial operations.

Palm Oil to Get a Break In Proposed Tax Repeal

Legislation suspending the 3-cent-per-pound processing tax on palm oil was reported favorably to the senate last week by the senate finance committee. The bill has passed the house and will come up in the senate for action.

The tax applies to the first processing operation on palm oil, palm kernel oil, and fatty acids or salts derived from them. The purpose of the tax repeal is to equalize competitive conditions between these oils and coconut oil. Congress suspended the coconut oil tax last year.

Business Gains Almost Dramatic, Buyers Declare

The pickup in business is going forward almost dramatically. The 56 percent of our members who report better production this month is the highest number so reporting since early 1955.

Only 3 percent indicate production decreases, while 41 percent say there is no change. Coupled with these improved production statistics we have, also, reas-

This report was prepared by the business survey committee of the National Association of Purchasing Agents.

suring new order reports. As many as 53 percent tell of higher new bookings, 35 percent show no change, and only 12 percent have a poorer position.

But, the dark cloud hovering over this rosy picture continues to be uncertainty about a midsummer letdown. There is almost unanimous agreement that part of the current production of many items is going into inventory for strike protection purposes.

However, it is encouraging to note that, in numerous instances, the inventory build-up has not reached planned levels because of increased output. Despite this, most of our members are managing to add to their stocks of purchased materials.

Upward Price Movement Modest

The abundant supply of most materials, coupled with intense price competition, has tended to keep the upward movement of prices modest, despite the good general business conditions. Nevertheless, many of those reporting express concern that continuing wage increases, which fuel, in part, the inflationary fire, will dilute the net benefits of the stronger business patterns.

Unemployment continues to be a problem in many areas. Therefore, our special question this month asked if, in our members' companies, employment in the second quarter would be more, the same, or less than in the first quarter of 1959.

A total of 38 percent said they expected to add people to their payrolls; only a small number, 6 percent, foresaw decreases, while the remaining 56 percent predicted no change.

Commodity prices this month have been relatively stable, due to abundance of supply and intense competition. While not as many—28 percent—show higher prices this month as last——39 percent, there are still only 2 percent who report prices generally lower. This leaves the large majority, 70 percent, indicating no change. The peculiar soft-price position of steel scrap and the somewhat erratic price behavior of the nonferrous metals

—Continued on page 42

Styrene Molding Material Moves in Big Bulk Shipment

The plastics industry's first 100,000-pound bulk shipment of styrene molding material was made last week from Monsanto Chemical Company's plant, Springfield, Mass., to Amos Molded Plastics in Edinburg, Ind., a custom molder.

A covered hopper car, loaded and unloaded pneumatically, was used to make the shipment of the company's white "Lustrex" high-impact molding material.

FM&C Starts Addition To Research Laboratory

The chemical divisions of Food Machinery & Chemical Corporation, New York, have started construction of a major addition to the Central Chemical Research Laboratory at Princeton, N. J.

The expansion, in the form of a new wing, will add more than 50 percent to the laboratory floor space. Slated for use in February, 1960, the new section will cost around $1 million.

The recently formed inorganic chemicals research and development department, under the direction of Dr. Hans O. Kauffmann, will occupy most of the new wing, using it to increase product application and sales-service activities.

Chemicals in Japan—They're Keeping on the Move

Things chemical are not what they used to be in Japan. Dr. Robert S. Aries, an American researcher, says they are changing "radically" in keeping with a trend that got under way ten years ago and has been gathering momentum ever since.

Now doing a survey on the country, Dr. Aries has this to say:

"In recent years Japanese scientists and technologists have developed orignal processes for organic chemicals, antibiotics, elastomers, plastics and rare metals, to mention some outstanding samples."

Furthermore, extensive improvements have been made on many of the chemical processes they have licensed abroad, and the Japanese research effort now is larger in size and importance than those of most western European countries.

As head of Aries Associates, Stamford, Conn., the doctor points out that the research effort is turning up many opportunities for US firms to acquire profitable chemical technology.

The survey is being conducted by a team of Japanese technologists under Dr. Aries' direction. Leading chemical process firms in the country as well as important private and university laboratories are being contacted.

It is also expected, says Dr. Aries, that the information on the latest chemical developments will point the way to agreements for the joint development of new products at low cost, or the follow up of important research and development.

The survey is also reported to be providing realistic information on the competition from low-cost products and indicates the feasibility of export-import arrangements.

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CHEMICALS AND RELATED MATERIALS

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Current MARKET Quotations

Unless otherwise indicated, listings are first-hand quotations prevailing, according to information and belief, May 8 on large lots, f.o.b. New York, with the lowest in the left-hand column and the highest in the right-hand column. The listings do not represent bid and asked prices nor a range over the week. Differences between high and low may be accounted for by differences in quantity, quality, locality, or individual suppliers' views. An index to the weekly market reports is to be found on page 4.

A

Abies siberica oil, ens. ..... lb. 2.50 - 3.00
Acacia (see Arabic gum).
Acenaphthene, below 92.5 C. m.p., dms., works lb. .40 - —
Above 92.5 C. m.p., bbls., dms., lb. .41 - .50
Acetaldehyde, 99%, dms., c.l., works, lb. .12 - —
dms., l.c.l., works ..... lb. .13½- —
tanks, works ..... lb. .10 - —
Acetaldol (see Aldol).
Acetanilide, tech., flaked, bbls., bgs., c.l., frt. alld lb. .32½- —
bbls., bgs., ton lots, frt. alld. lb. .33½- —
bbls., bgs., smaller lots, frt. alld lb. .36½- —
USP, bbls., 225-lb. dms. any quantity lb. .79 - —
100-lb. dms., any quantity lb. .81 - —
Acetic acid, coml. or redist., 28%, bbls 100 lbs. 4.80 - —
56%, bbls. ..... 100 lbs. 8.25 - —
70%, bbls. ..... 100 lbs. 9.95 - —
80%, bbls. ..... 100 lbs. 10.45 - —
Acetic acid, glacial, syn., CP, dms., dlvd. 100 lbs. 22.00 -23.00
tech., dms., c.l., dlvd. ... 100 lbs. 13.75 - —
dms., l.c.l., dlvd. ..... 100 lbs. 14.25 - —
tanks, dlvd. ..... 100 lbs. 10.00 - —
USP, cbys., dlvd ..... 100 lbs. 31.00 -32.00
Acetic anhydride, aluminum ret. dms., c.l., dlvd. E lb. .16½- —
aluminum ret. dms., l.c.l., dlvd. E. lb. .18 - —
tanks, dlvd. E. ..... lb. .14 - —
Acetoacetanilide, fib. dms., c.l., dlvd lb. .80 - —
fib. dms., l.c.l., dlvd. ..... lb. .81 - —
Acetoacet-o-chloroanilide, fib. dms., c.l., dlvd lb. 1.35 - —
fib. dms., l.c.l., dlvd. ..... lb. 1.36 - —
Acetoacet-o-toluidide fib. dms., c.l., dlvd lb. .82 - —
fib. dms., l.c.l., dlvd. ..... lb. .83 - —
Acetone, CP, dms., c.l., dlvd. .. lb. .11 - —
dms., l.c.l., dlvd ..... lb. .12½- —
tanks, dlvd. ..... lb. .03½- —
Acetonitrile, dms., c.l., works ... lb. .45 - —
dms., l.c.l., works ..... lb. .45¾- —
tanks, works ..... lb. .43 - —
Acetophenetidin, USP, 200-lb. dm., 1,000 lbs., frt. alld lb. 1.22 - —
100-lb. dm., 1,000 lbs., frt. alld. lb. 1.24 - —
Acetophenone, cns., dms. ..... lb. .42 - 1.30
Tech., dms., c.l., works ..... lb. .37 - —
dms., l.c.l., works ..... lb. .37¾- —
tanks, works ..... lb. .35 - —
N-Acetyl-p-aminophenol, 1,000-lb. lots, frt. adjusted lb. 1.45 - —
smaller lots, dms., same basis lb. 1.55 - 1.63
Acetylene black, imp., bgs., c.l., duty and freight extra lb. .19 - —
cs., l.c.l., ex whse. ..... lb. .24½- .30
Acetylsalicylic acid, USP, special, makers, primary distrib., bbls., 1,000-lb. lots, point of shipt lb. .63½- —
USP, standard, fine, cryst. gran., (20-40 mesh) powd., (80 mesh), 250-lb. bbls., c.l., t.l., same basis lb. .55¼- —
Freight equald. shipt. identical quantity over standard routes, from N. Y., Phila., Midland, Mich., Chicago and St. Louis.
Acetyltributyl citrate, tech., non-ret. dms., c.l., frt. alld. E. of Denver lb. .35½- —
non-ret. dms., l.c.l., frt .alld. E. of Denver lb. .36½- —
tanks, frt. alld. E. of Denver, lb. .33 - —
Acetyltriethyl citrate, tech., non-ret. dms., c.l., frt. alld. E. of Denver lb. .39½- —
non-ret. dms., l.c.l., frt. alld. E. of Denver lb. .40½- —
tanks, frt. alld. E. of Denver lb. .37 - —

Acids

Acid quotations are listed individually. For example, prices on Acid, cresylic, may be found in the C's under Cresylic acid.

Aconite root, bls. ..... lb. .50 - .55
Acrolein, tech., dms., c.l., works lb. .51 - —
dms., l.c.l., works ..... lb. .51¾- —
tanks, works ..... lb. .46 - —
Acrylamide, dms., t.l., f.o.b. works, lb. .58 - —
dms., l.t.l., same basis ..... lb. .60 - —
Acrylic acid, glacial, dms., l.t.l., dlvd. lb. .65 - —

Abies Siberica Oil—Ammonium Bicarbonate

Acrylonitrile, dms., c.l., t.l., frt. equald lb. .30 - —
dms., l.c.l., l.t.l., frt. equald .. lb. .31 - —
tanks, frt. equald ..... lb. .27 - —
Adeps lanae (see lanolin).
Adipic acid, bgs., c.l., dlvd. ..... lb. .32¼- —
bgs., l.c.l., dlvd. ..... lb. .35 - —
Agar, USP, Kobe No. 1, strip, bls. lb. 1.90 - 2.10
powd., 30 mesh, fib. dms lb. 2.50 - —
di Alanine, dms., works ..... lb. 8.50 -11.00
Aldol, 95%, dms., l.c.l. ..... lb. .28 - —
Aldrin, tech., fib. dms., c.l., t.l., dlvd lb. .93 - —
fib. dms., l.c.l., dlvd ..... lb. .98 - —
Aletris root, bgs. ..... lb. 1.75 1.85

Alcohols

Alcohol quotations are listed individually. For example, prices on Alcohol, furfuryl, may be found in the F's under Furfuryl alcohol.

Algin (see Sodium alginate)
Alizarin (see 1,2-Dihydroxy anthraquinone).
Alkali blue dry, 250-lb. bbls., dlvd. E. of Rockies lb 2.38 - —
Alkali blue, toner, litho flushed, 125-lb. bbls. same basis. lb. 1.35 - —
Alkali blue prices 1c. higher W. of Rockies
Allethrin, 90% dms., frt. alld lb. 28.80 -28.90
Soln., 20% dms., 200-2,000 lb. lots, frt. alld lb. 6.50 6.55
2½% dms. frt. alld. ..... lb. .95 1.10
Allspice oil (see Pimento oil).
Allyl alcohol, dms., c.l. dlvd. ... lb. .32½- —
dms., l.c.l., dlvd ..... lb. .34 - —
tanks, dlvd. ..... lb. .30 - —
Allyl bromide 55-lb. cbys. 5,005 lbs. or more, works lb. 1.47 - —
55-lb. cbys., 1,045 to 4,950 lbs., works lb. 1.52 - —
55-lb. cbys., 55 to 990 lbs. works. lb. 1.57 - —
Allyl chloride dms., c.l., dlvd. lb. 17½- —
dms., l.c.l., dlvd ..... lb. .19 - —
tanks, dlvd ..... lb. .15 - —
Allyl isocyanate (see Mustard Oil, syn.).
Almond oil, artif., bitter (see Benzaldehyde)
Almond oil, nat., bitter, f.p.a., bots. lb. 2.75 - 3.45
NF, bots. ..... lb. 3.00 - 3.50
sweet, USP, cns., dms. ..... lb. .75 - 1.30
Aloe, Cape, cs. ..... lb. .32 - .37
powd., cs. ..... lb. .60 - .65
Curacao, kgs. ..... lb. .60 - .70
powd., kgs. ..... lb. .80 - —
Aloin, USP, bbls., dms., kgs. .... lb. 3.25 - 3.75
Alphanaphthol (see a-Naphthol).
Alphanaphthylamine (see a-Naphthylamine).
Alphanitronaphthalene (see a-Nitronaphthalene)
Alphapicoline (see a-Picoline).
Alphaterpineol (see a-Terpineol).
Alphatocopherol (see a-Tocopherol).
Alum, ammonium, gran., bgs., works 100 lbs. 4.30 - —
lump, dms., works ..... 100 lbs. 5.05 - —
powd., dms., works ..... 100 lbs. 5.20 - —
USP, burnt, dms. ..... lb. .20 - .21
hydrous, dms. ..... lb. .07¾- .08
Alum, potassium, gran., bgs., works. 100 lbs. 4.55 - —
lump, dms., works ..... 100 lbs. 5.30 - —
powd., dms., works ..... 100 lbs. 5.45 - —
USP, burnt., dms. ..... lb. .20 - .21
hydrous, dms. ..... lb. .07¾- .08
Alum, potash-chrome, dms. ..... lb. .17 - —
Alumina, calcined, bgs., c.l., works. lb. .05 - —
bgs., l.c.l., works ..... lb. .05¼- .08
Aluminum acetate, basic soln., 24%, bbls., l.c.l., works lb. .14 - —
Aluminum chloride, coml., anhyd., dms., c.l., works, frt. equald lb. .16 - —
dms., l.c.l., works ..... lb. .16½- —
cryst., dms., c.l, works 100 lbs. 21.00 - —
dms., l.c.l., works ... 100 lbs. 21.50 - —
soln., 32° cybs., c.l., works lb. .0495- —
cbys., l.c.l., works ..... lb. .0570- .1095
tanks, works ..... 100 lbs. 3.95 - —
NF, gran., dms., works ..... lb. .31 - .32
Aluminum fluoride, tech., anhyd., bgs., c.l., works lb. .17¼ - —
bgs., l.c.l., works ..... lb. .18¼ 20¼
Aluminum fluoride in fib. dms. 0.35c. per lb. higher
Aluminum formate, basic soln., containers extra c.l., works. 100 lbs. 11.00 - —
containers extra, l.c.l. works. 100 lbs. 11.50 - —
Aluminum hydrate, heavy, bgs., c.l., frt. equald lb. .03½- —
bgs., 20,000-40,000 lb lots, same basis lb. .03¾ - —
bgs., 2,000-20,000 lb. lots, same basis lb. .04¾ - —
bulk, c.l., same basis lb. .03¼ - —
Aluminum hydroxide, dried, USP XV, fib dms., works lb. .82½ - —
fib. dms., contract, works lb. 79½ - —
Aluminum hydroxide, gel, pharmaceutical, 14-15% Al_2O_3, fib. dms., works lb. .22 - —
9-9½% Al_2O_3, fib dms., works lb. .19 - —
fib dms., contract, works. lb. .18 - —
Aluminum hydroxide, tech., powd. (See Aluminum hydrate).
Aluminum metal, 99%+, ingots, 10,000-lb. lots, frt. alld lb. .2380- —
pigs, 10,000-lb lots, frt. alld lb. .2470 - —
Aluminum oxide, amorphous (See Alumina, calcined).
Aluminum paste, lining, extra-fine, dms lb. .69½- —
Standard grade, dms. ..... lb. .47 - —
Aluminum powder, lining, extra-fine, dms lb. 1.11 - —
Standard grade, dms. ..... lb. .81 - —
Aluminum paste and powder prices are f.o.b. shipping point. Add 1c. per lb. for 100-lb. dm., 1½c. per lb. for 50-lb. dm., 3c. per lb. for 10 lb. can and 5c. to 12c. per lb. for smaller containers. Deduct 1c. per lb. for single shipment of 400 to 1,499 lbs., 2c. for 1,500 to 4,999 lbs., 3c. for 5,000 to 29,999 lbs. and 4c. for 30,000 lbs. or more. Where destination is within the continental U. S., a deduction equivalent to the lowest available common carrier transportation rate will be made from seller's invoice on orders of 200 lbs. or over
Aluminum resinate, precip., 2.1% t.l.t., dms lb. .38¼ - —
Aluminum stearate, dibasic, ctns., c.l lb. .39 - —
ctns., l.c.l. ..... lb. .40 - 44
Monobasic, ctns., c.l. ..... lb. .39 - —
ctns., l.c.l. ..... lb. .40 - 44
Tribasic, ctns., c.l. ..... lb. .39 - —
ctns., l.c.l. ..... lb. .40 - 44
Aluminum sulfate, coml., grd., bgs. c.l., works, frt. equald ton. 41.00 - —
grd., bulk, c.l., same basis ton. 40.00 - —
lump, bgs., c.l., same basis ton. 44.00 - —
Coml., iron-free, bgs., c.l., works, frt equald 100 lbs. 3.60 - —
bgs., l.c.l., works, frt. equald. 100 lbs. 4.30 - 8.30
USP, gran., dms., works lb. .30 - —
powd., dms., works lb. .37 - —
Aluminum sulfate prices $1 per ton higher in the South.
Aluminum trihydrate, heavy (see Aluminum hydrate, heavy).
Ambergris, gray, bots ..... oz. 6.50 -10.00
p-Aminoacetanilide, tech., paste, dms., frt. alld lb. 1.57 - —
Aminoacetic acid, NF, bbls., frt. adjusted lb. 1.50 1.75
Aminoazotoluene base, bbls., 100% basis lb. 1.03 - 1.18
p-Aminobenzoic acid, tech., dry, dms., works lb. 1.72 - —
2-Amino-4-chlorophenol, tech., solid, dms., frt. alld lb. 8.10 - —
p-Aminodiphenylamine, tech., solid, dms., frt. alld lb. 3.00 - —
Aminoethyl ethanolamine, dms., c.l., dlvd lb. .475 - —
dms., l.c.l., dlvd ..... lb. .49 - —
tanks, dlvd. ..... lb. .45 - —
2-Amino-2-methyl-1-propanol, dms., c.l., frt. alld lb. .44 - —
dms., l.c.l., frt. alld. ..... lb. .45 - —
tanks, frt. alld. ..... lb. .42 - —
m-Aminophenol, dist., dms., ton lots. lb. 2.03 - —
dms., smaller lots. ..... lb. 2.50 - —
p-Aminophenol, dms., frt. alld. . lb. 1.15 - —
Aminophylline, USP, 100-lb. dm., frt. alld lb. 3.55 - —
p-Aminosalicylic acid, dms., 100 lbs. or more, frt. adjusted lb. 3.40 - —
Ammonia, anhyd., fertilizer, tanks, works, frt. equald. E. of Rockies ton. 88.00 - —
refrigeration, tanks, works, frt. equald E. of Rockies ton. 90.50 - —
Aqueous, 29.4%, tanks, works, anhyd. basis, E. of Rockies. ton. 91.00 - —
Ammoniacal liquor (see Ammonia, aqueous).
Ammoniac, sal gray, bgs., c.l., works, frt, equald 100 lbs. 8.25 - —
bgs., l.c.l., same basis 100 lbs. 8.65 -12.65
Ammoniac, sal., white (see Ammonium chloride, tech.).
Ammonium acetate, purif., dms lb. .40 - —
Ammonium benzoate, USP, fib. dms. ton lots, works lb. 1.00 - —
fib dms. 1,000-lb lots, works. lb. 1.05 - —
Ammonium biborate, gran., dms., c.l., works ton. 325.00 - —
dms., ton lots, ex whse. 100 lbs. 20.40 - —
dms., smaller lots, ex whse. 100 lbs. 21.15 - —
Ammonium bicarbonate, dom., dms., c.l., works 100 lbs. 7.00 - —
dms., l.c.l., works ..... 100 lbs. 9.00 - —

Abbreviations

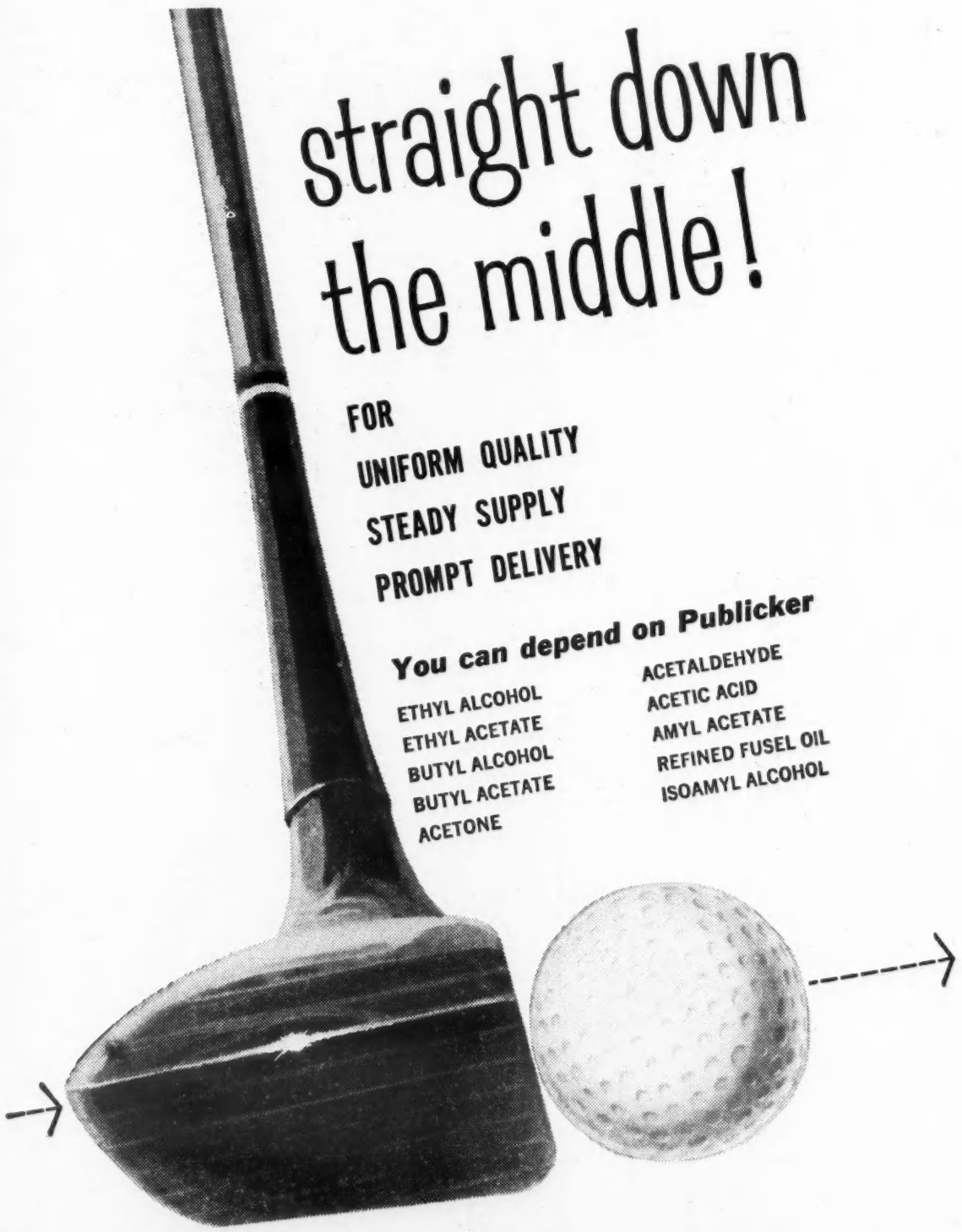
Used in OPD Market Quotations

alld.	allowed	distr.	distributor	No.	number
amorph.	amorphous	djns.	demijohns	nom	nominal
AMP	American melting point	dlvd.	delivered	o-	ortho
anhyd.	anhydrous	dms.	drums	ord.	ordinary
AOAC	Association of Official Agricultural Chemists	dom.	domestic	oz.	ounce
		E	east	p-	para
a.p.a	available phosphoric acid	e.p.	end point	Pac.	Pacific
		equald.	equalized	pf.	proof
approx.	approximately	exp.	expressed	phos.	phosphate
artif.	artificial	Ext.	external	photo.	photographic
ASTM	American Society for Testing Materials	F.	fahrenheit	pkgs.	packages
		ferment.	fermentation	powd.	powdered
Atl.	Atlantic	f.f.a.	free fatty acid	precip.	precipitated
Be.	Baume	f.f.c.	free from chlorine	prod.	producer
bbls.	barrels	fib.	fiber	pt.	point
bgs.	bags	f.o.b.	free on board	pulv.	pulverized
bls.	bales	f.p.a.	free of prussic acid	purif.	purified
bots.	bottles	frt.	freight	redist.	redistilled
b.p.	boiling point	gal.	gallon	refd.	refined
b.p.l.	bone phosphate of lime	gran.	granular	refy.	refinery
		grd.	ground	reg.	regular
b.r.	boiling range	i &a.	iron and aluminum	resub.	resublimed
bxs.	boxes			ret.	returnable
C.	centigrade	t.b.p.	initial boiling point	SD	specially denatured
cbys.	carboys	imp.	imported	s.d.	single distilled
CD	completely denatured	incl.	included	S. E.	southeast
		indust.	industrial	sec.	secondary
c.i.f.	cost, insurance, freight	kgs.	kegs	secs.	seconds
		l-	laevo	s.g.	specific gravity
cks.	casks	lacq.	lacquer	shipt.	shipment
c.l.	carlots	lb.	pound	soln.	solution
cns.	cans	l.c.l.	less than carlots	s.u.	standard unit
coml.	commercial	l.t.l.	less truckload	syn.	synthetic
conc.	concentrated	liq.	liquid	tanks.	railroad tankcars
CP	chemically pure	mfrs.	manufacturers	tech.	technical
cps.	centipoises	m-	meta	tert-	tertiary
cryst.	crystalline	m.a.p.	mixed aniline point	t.l.	truck loads
cs.	cases	min.	minimum	t.w.	tank wagons
ctns.	cartons	m.p.	melting point	USP	U. S. Pharmacopoeia
cyls.	cylinders	N-	nitrogen		
d-	dextro	n-	normal	vis.	viscosity
dbl.	double	nat.	natural	VM&P	varnish makers & painters
denat.	denatured	neut.	neutral		
dest-dist.	destructively—distilled	NF	National Formulary	W.	west
		NNR	New and Nonofficial Remedies	whse.	warehouse
dl-	dextrolaevo			w. w.	water-white
dist.	distilled				

A unit-ton is 2,000 pounds of 1 percent of the basic constituent or other standard of the material. The percentage figure of the basic constituent multiplied by the price figure shown gives the price of 2,000 pounds of the material

Ammonium Bichromate-Asphalt

Ammonium bichromate, dms., works lb. 42 - .43
Ammonium bifluoride, dms., dlvd lb. .2145 - .2245
Ammonium bromide, NF, 450-lb. bbl., frt. equald lb. .45 - —
100 lb. dm., frt. equald lb. .46 - —
Ammonium carbonate USP lump, dms., c.l lb .15½ - —
Ammonium chloride, tech., fine gran., bgs., c.l., works 100 lbs 5.75 —
bgs l.c.l., works 100 lbs 7.75 8.20
USP, gran., fib dms lb .17¼ —
Ammonium citrate dibasic, 250-lb. dm., f.o.b. works lb. .77 - —
Ammonium dichromate (see Ammonium bichromate).
Ammonium fluoride (see Ammonium bifluoride).
Ammonium gluconate, tech., 200-lb. dm., f.o.b. works E lb. .45 - —
Ammonium hydroxide (see Ammonia aqueous).
Ammonium iodide, NF, 25-lb. jar, f.o.b. works lb. 4.26 - —
Ammonium lauryl sulfate, dms., c.l., frt. alld lb. .20½ - —
dms., l.t.l., frt. alld lb. .21½ - —
tanks, frt. alld lb. .19½ - —
Ammonium linoleate, 80%, dms., works lb. 50 .55
Ammonium lignin sulfonate bgs., c.l., works 100 lbs 3.25 - —
bgs., l.c.l., works 100 lbs 3.40 - 3.65
Ammonium molybdate, CP, cryst., fib. dms., 15,000 lbs. works lb. 1.22 - —
fib. dms., 2,000-lb. contracts, works lb 1.23 - —
single fib. dms., works lb. 1.24 - —
Ammonium nitrate, dom. fertilizer grade, 33.5% N bags., f.o.b., works ton 68.00 - —
Imp., Canadian, 33.5% N, eastern, bgs., c.l., ship't point, frt. equald to $3 ton base price. ton 68.00 - —
with dolomite, 20.5% N, bgs., c.l., Hopewell, Va ton 45.50 - —
Ammonium oxalate, tech., fine gran., 250-lb. dm., f.o.b. works E lb. .28½ - —
powd., 200-lb. dm., same basis lb. .28½ - —
Ammonium pentaborate, gran., bgs., c.l., works ton 193.00 - —
bgs., ton lots, ex whse. 100 lbs. 14.23 - —
bgs., smaller lots, ex whse. 100 lbs. 15.48 - 17.48
Ammonium pentaborate powder $10 per ton higher in bags.
Ammonium persulfate, tech., dms., 10-ton lots or more, works. lb. .18 - —
dms., smaller lots, works lb. .20 - .23
Ammonium phosphate, coml., bgs., c.l., works, frt. equald lb. .09¼ - —
bgs., l.c.l., same basis lb. .10 - —
Ammonium phosphate, dibasic, NF V, bbls., dms lb. .46 - —
Ammonium phosphate, tech., bgs., c.l., works, frt. equald. lb. .09¼ - —
bgs., l.c.l., same basis lb. .10 - —
Ammonium silicofluoride, dms., works lb. .11¾ - .13¼
Ammonium sulfamate bgs., c.l., t.l., works lb. .19 - —
bgs., l.c.l., works lb. .20½ - .27
Ammonium sulfate, standard granular, bulk, f.o.b. works, base price ton 32.00 - —
purif., bgs., f.o.b. works lb. .08½ - .15
large granular, bulk, c.l., works. ton 35.00 - —
bgs., c.l., works ton 40.00 - —
Tech., bulk, c.l., t.l., works ton 52.00 - —
bgs., c.l., t.l., works ton 56.00 - —
bgs., l.c.l., l.t.l., works—100 lbs 3.20 - 7.20
Ammonium sulfide, liq., 40-44%, tanks, frt., equald., 100% basis ton 160.00 - —
Ammonium sulfocyanide, tech. (see Ammonium thiocyanate).
Ammonium thiocyanate, tech., cryst., dms. c.l. works lb. .20 - —
dms., l.c.l., works lb. .22 - .26
tech., soln, 50%, tanks, frt. equald., basis ammonium thiocyanate content lb. .17¼ - —
Ammonium thioglycollate, coml., cbys., 100% basis lb. 1.35 - 1.65
Highly purif., cbys. 100% basis. lb. 1.70 - 1.96
d-Amphetamine hydrochloride, dibasic, bots lb. 17.50 - 23.00
dl-Amphetamine hydrochloride, dibasic, bots lb. 4.50 - 6.00
d-Amphetamine hydrochloride, monobasic, dms lb. 17.50 - 21.00
d-Amphetamine phosphate, fib. dms., 100-lb. lots lb. 15.00 - —
dl-Amphetamine phosphate, dms. lb. 4.20 - 5.00
d-Amphetamine sulfate, fib. dms., lb. 13.00 - 17.00
dl-Amphetamine sulfate, fib. dms., lb. 4.20 - 5.00
Amyl acetate, ex fusel oil, tech., dist., from 125° to 150°C., dms., c.l., frt. alld. E. of Rockies lb. .18½ - .19
dms., l.c.l., same basis lb. .20 - .20¼
tanks, same basis lb. .16 - .16¼
Amyl acetate, ex pentane, reg. dms., c.l., dlvd lb. .19 - —
dms., l.c.l., dlvd lb. .21½ - —
tanks, dlvd. lb. .16½ - —
Tech., dms., c.l., dlvd. lb. .17 - —
dms., l.c.l., dlvd lb. .18½ - —
tanks, dlvd. lb. .14½ - —
Syn., oxo process, dms., c.l., dlvd. lb. .19 - —
dms., l.c.l., dlvd lb. .20½ - —
tanks, dlvd. lb. .16½ - —
Amyl alcohol, ex fusel oil (see Fusel oil refd.).
Amyl alcohol, ferment, refd., 128°-132°C., dms., l.c.l., dlvd lb. .43½ - —
refd., ACS grade, dms., l.c.l., dlvd lb. .45½ - —
Amyl alcohol, ex pentane, mixed, amyls, dms., c.l., frt. alld. lb. .19 - —
dms., l.c.l., frt. alld lb. .20½ - —
tanks, frt. alld lb. .16½ - —
primary, dms., c.l., frt. alld. lb. .19¾ - .20¼
dms., l.c.l., frt. alld lb. .21¼ - .21¾
tanks, frt. alld lb. .17¼ - .17¾
sec-synthetic, dms., c.l., works, frt. alld lb. .19 - —
dms., l.c.l., works lb. .20½ - —
tanks, works lb. .17 - —
tert-synthetic, dms., c.l., frt. alld. E lb. .17 - —
dms., l.c.l., frt. alld. E lb. .18½ - —
tanks, frt. alld. E lb. .14½ - —
Amyl alcohol, 1-pentanol (syn. normal), dms., c.l., works lb. .41½ - —
dms., l.c.l., works lb. .43 - —
tanks, works lb. .39½ - —
Amyl alcohol, 2-pentanol, dms., c.l., works lb. .65 - —
dms., l.c.l., works lb. .70 - —
tanks, works lb. .60 - —
Amyl n-butyrate, dms. lb. 1.00 - 1.25
Amyl cinnamic aldehyde, dms lb. 1.75 2.20
p-tert Amyl phenol, dms., c.l., works. lb. .26¾ - —
dms., l.c.l., works lb. .27¾ - —
Amyl salicylate, cns., dms. lb. .80 - 1.10
Amyris oil, dms. lb. 1.50 - 2.05
Anethole, USP, cns., dms lb. 1.15 - 1.50
Tech., dms. lb. .85 - .90
Angelica root, bls. lb. .90 - 1.00
Angelica root oil, bots lb. 120.00 - 140.00
Angelica seed oil, bots. lb. 120.00 - 130.00
Aniline, dms., c.l., frt. alld lb. .20 - —
dms., l.c.l., frt. alld. lb. .21 - —
tanks, frt. alld. lb. .18 - —
Aniline oil (see Aniline).
Aniline salt, dms., c.l., truckloads, 20,000 lbs. min., frt. alld. lb. .33 - —
dms., l.c.l., same basis lb. .35 - —
Anise oil, USP, dms. lb. 1.75 - 3.00
Anise seed, Mexican, bgs lb. .22 - —
Spanish, bgs. lb. .20 - —
Anisic aldehyde, dms. lb. 1.85 - 2.20
o-Anisidine, dms., c.l., frt. alld lb. .80 - —
dms., l.c.l., same basis lb. .82 - —
tanks, same basis lb. .78 - —
p-Anisidine, dms., works lb. .97 - —
Anthracene, 90-95%, dms., c.l., t.l., f.o.b., works lb. .42½ - —
dms., l.c.l., minimum shipment 1,000 lbs., same basis lb. .45 - —
Anthranilic acid, 99%, 150-lb. dms., dlvd lb. 1.15 - —
Anthraquinone, 99.5%, bbls., c.l., frt. alld lb. .83 - —
bbls., l.c.l., same basis lb. .86 - —
Electrical grade, bbls., l.c.l., same basis lb. 1.10 - —
Antimony butter (see Antimony trichloride).
Antimony metal, bulk, c.l., mines. lb. .29 - —
cs., c.l., mines lb. .29½ - —
Antimony oxide, bgs., c.l., frt. alld. lb. .24½ - —
bgs., l.c.l., frt. alld. lb. .26 - —
Antimony sulfide, approx. 65%, bgs., 10,000-lb. lots, dlvd lb. .23 - —
bgs., smaller lots, dlvd lb. .24 - .26
Antimony trichloride, anhyd., solid, pails, c.l., works lb. .41 - —
pails, l.c.l., works lb. .43 - —
Antimony-potassium tartrate, tech., powd., 250-lb. dms lb. .69½ - —
USP, powd., 250-lb. dms. lb. .74½ - —
Antipyrine, NF, 200-lb. bbls lb. 3.50 - —
Apomorphine hydrochloride, USP, 25-oz. lots oz. 35.60 - —
Apricot kernel oil, USP, dms lb. .75 - 1.00
Arabic gum, amber sorts, bgs lb. .25 - .26
USP, powd., bbls. lb. .28 - .30
Areca nuts, powd., bbls. lb. .13 - —
Arecoline hydrobromide, NF, bots., tin oz. 4.00 - 4.50
l-Arginine, free base, dms., 10-kilo lots or more kilo. 90.00 - —
l-Arginine glutamate, dms., 10-kilo lots or more kilo. 60.00 - —
l-Arginine hydrochloride, dms., 10-kilo lots or more kilo. 60.00 - —
Arnica flowers (true Montana), bls. lb. 1.10 - 1.20
Arsenic, crude (95%), bulk, c.l., works lb. .016 - —
bbls., c.l., works lb. .031 - —
Arsenic trioxide, USP, dms lb. .48 - —
Arsenic white, powd., bbls., c.l., works lb. .04½ - —
bbls., l.c.l., works lb. .06½ - .07¼
Arsenous acid, tech. (see Arsenic, white).
Arsenous acid, USP (see Arsenic trioxide).
Arylid maroons, deep shades, bbls. lb. 3.70 - —
Light shades, bbls. lb. 2.85 - —
Asafetida gum, cns lb. .36 - .40
Powd., bbls., dms lb. .75 - .80
Asbestine (see Talc fibrous, New York).
Asbestos, Canadian crude
6D, c.l. (30 tons) mines ton 86.00 - —
7D, c.l. (30 tons) mines ton 75.00 - —
7F, c.l. (30 tons) mines ton 71.00 - —
7H, c.l. (30 tons) mines ton 61.00 - —
7K, c.l. (30 tons) mines ton 50.00 - —
7M, c.l. (30 tons) mines ton 44.00 - —
7R, c.l. (30 tons) mines ton 43.00 - —
7RF, c.l. (30 tons) mines ton 44.00 - —
7T, c.l. (30 tons) mines ton 41.00 - —
7TF, c.l. (30 tons) mines ton 44.00 - —
Asbestos prices are in Canadian funds; l.c.l. lots $4 per ton higher.
Ascorbic acid, USP, 25, 50-kilo dms., kilo. 10.00 - —
10 kilo dms. kilo. 10.35 - —
5-kilo dm kilo. 10.75 - —
1-kilo bottle kilo. 11.00 - —
500-gram bottle kilo. 11.50 - —
Ash black (see Barium sulfide).
Asphalt, gilsonite, black jet, bgs., c.l., mines ton 40.00 - —
ex-whse, N. Y., N. J ton 86.50 - —
seconds, 300°-390°F. fusing pt., bgs., c.l., mines ton 35.00 - —
select, 350°F. fusing pt., bgs., c.l., mines ton 41.00 - —
270°-295°F. fusing pt., bgs., c.l., mines ton 40.00 - —
Manjak No. 10 crude, dms., works. lb. .07 - —



PUBLICKER INDUSTRIES Inc.

1429 WALNUT STREET, PHILADELPHIA 2, PA.

NEW YORK • NEW ENGLAND • MIDWESTERN DISTRIBUTORS, PUBLICKER ALCOHOL & CHEMICAL SALES CORP.

PHILADELPHIA—LOCUST 4-1400 • NEW YORK—OXFORD 5-4160 • BOSTON—HOMESTEAD 9-0022

CHICAGO—RANDOLPH 6-6678

Asphalt, petroleum, cut-back, tanks, tankwagon, refy. gal. .09 - —
emulsion tanks tankwagon, refy. gal. .09½ - —
Asphalt, petroleum, steam-refd., 50-80 penetration, tanks, tankwagon, refy. ton 21.00 - —
85-300 penetration tanks, tankwagon, refy. ton 20.00 - —
Aspirin (see Acetylsalicylic Acid).
Atropine, NF, tins oz. 5.75 - 6.50
Atropine sulfate, USP, bots oz. 6.25 - 6.75
Avocado oil, f.o.b. Calif., cns. lb. 2.25 - 3.00

B

Bacitracin, bulk, 1,000,000 or more units 50,000 units. .65 - —
less than 1,000,000 units, 50,000 units. .70 - —
Balm of Gilead buds, dried, bgs lb. 1.25 - 1.35
Barberry root bark, bgs. lb. .50 - —
Barbital, NF, 100-lb. dms. lb. 4.50 - —
Barbital sodium, NF, dms. lb. 4.75 - —
Barium carbonate precip. bgs., c.l., works ton. 111.50 - —
bgs., smaller lots, works ton. 126.50 - —
Barium chlorate, dms., works lb. .32 - .41
Barium chloride, anhyd. bgs., c.l., works ton. 176.00 - —
bgs., l.c.l., works ton. 196.00 - —
Barium chloride, NF, cryst., 100 lb. dms lb. .22 - —
Tech., cryst., bgs., c.l., works, 100 lbs. 7.00 - —
bgs., l.c.l., works 100 lbs. 8.00 - —
Barium chromate, bgs. frt. equald. lb. .38 - —
Barium dioxide (see Barium peroxide).
Barium hydrate, cryst., ogs., c.l., t.l., frt. equald ton 208.00 - —
bgs., l.c.l., t.l., frt. equald ton 218.00 - —
Barium monohydrate, 99%, bgs., c.l., frt. equald 100 lbs. 11.25 - —
bgs., l.c.l., frt. equald 100 lbs. 11.75 - —
Barium monoxide (see Barium oxide).
Barium nitrate, bbls., c.l., t.l., dlvd. lb. .16 - —
bbls., l.c.l., t.t.l., dlvd. lb. .17 - —
Barium oxide, grd., dms., c.l., t.l., frt. equald ton 275.00 - —
dms., l.c.l., t.t.l., frt. equald. ton 285.00 - —
Barium peroxide, dms., frt. equald. lb. .20 - —
Barium stearate, ctns., c.l., frt. alld. lb. .41 - —
ctns., l.c.l., same basis lb. .42 - .46
Barium sulfate, tech. (see Barytes and blanc fixe).
Barium sulfate, X-ray, dms. lb. .15 - .15½
Barium sulfide, dms., c.l., works. ton. 100.00 - —
dms., l.c.l., works ton. 110.00 - —
Barytes, southern, off-color, bgs., mines ton. 25.00 - —
95-75%, bgs., mines ton. 25.00 - —
white, water-grd., paper bgs., c.l., St. Louis ton. 55.00 - 55.25
paper bgs., ex whse., New York ton. 79.85 - —
Battery acid, cbys. c.l. works, E. 100 lbs. 2.35 - —
cbys., l.c.l., works, E. 100 lbs. 2.65 - 10.95
Bauxite, bulk, mines ton 7.00 - 10.00
Bay oil, NF, Puerto Rican, 50-55% cns lb. 2.25 - 2.75
55-60%, cns. lb. 2.50 - 3.05
West Indian, 50-55% cns. dms., lb. 2.30 - 3.00
Bayberry wax, bgs. lb. .45 - .47
Beeswax, crude, African, bgs. lb. .55 - .56
Brazilian, bgs. lb. .56 - .57
Central American, bgs. lb. .53 - .54
Chilean, bgs. lb. .56 Nom.
Refd., USP bleached white, bricks, 100-lb. ctns. lb. .69 - .71
white, slabs, 100-lb. ctns. lb. .68 - .70
yellow, bricks, 100-lb. ctns. lb. .59 - .61
yellow, slabs, 100-lb. ctns. lb. .58 - .60
Belladonna leaf, bls. lb. .26 - —
Belladonna root, bls. lb. .28 - —
Bentonite, dom. 200 mesh, bgs., c.l., mines ton. 14.00 - —
Imp. Italian, white, high gel., bgs., 5-ton lots, ex whse ton. 91.00 - —
bgs., 1-ton lots, ex whse ton. 94.00 - —
low gel., bgs., 5-ton lots ex whse ton. 89.35 - —
bgs., 1-ton lots, ex whse ton. 92.35 - —
Benzal chloride, cbys., works lb. .44 - —
Benzaldehyde, NF, dms. lb. .80 - .86
Tech., dms., c.l., t.l. lb. .47 - —
dms., l.c.l. lb. .48 - —
Benzene, coaltar, pure or nitration, tanks, works:
Bethlehem, Pa. gal. .31 - —
Birmingham district gal. .31 - —
Chicago district gal. .31 - —
Cleveland district gal. .31 - —
Geneva, Utah gal. .31 - —
Johnstown, Pa. gal. .31 - —
Lackawanna, N. Y. gal. .31 - —
Lone Star, Tex. gal. .31 - —
Lorain, Ohio gal. .31 - —
Middletown, Ohio gal. .31 - —
Minnequa, Colo. gal. .31 - —
Philadelphia district gal. .31 - —
Pittsburgh district gal. .31 - —
Sparrows Point, Md. gal. .31 - —
Syracuse, N. Y. gal. .31 - —
Terre Haute, Ind. gal. .31 - —
Youngstown, Ohio gal. .31 - —
Benzene, petroleum, nitration or industrial, Houston, Tex., tanks, gal. .31 - —
Benzene hexachloride, 25% and 99% gamma isomer (see Lindane).
Tech., high gamma, dms., c.l., dlvd., gamma unit-lb. .00825- —
dms., l.c.l., works gamma unit-lb. .009 - .0095
low gamma, dms., c.l. dlvd. gamma unit-lb. .00825- —
dms., l.c.l., works gamma unit-lb. .009 - —
Benzidine hydrochloride, bbls., c.l., frt. alld., 100% basis lb. 1.19 - —
bbls., l.c.l., same basis lb. 1.21 - —
Benzidine sulfate, tech., bbls., frt. alld., 100% basis lb. 1.21 - —
Benzidine yellow, AAA, bbls. dlvd. lb. 2.30 - —
AAOT, bbls., dlvd. lb. 2.55 - —
Lightfast, bbls., dlvd. lb. 3.40 - —
Benzocaine, dms. lb. 3.48 - 3.50
Benzoic acid, tech., bbls., dms., c.l., t.l., frt., alld. lb. .37 - —
bbls., dms., ton lots, same basis lb. .41 - —
bbls., dms., 1,000-lb. lots, same basis lb. .43 - —
USP, bbls., dms., ton lots lb. .48 - —
bbls., dms., 1,000-lb. lots lb. .50 - —
Benzoin gum, Sumatra, cs. lb. .33 - —

Benzol

Benzol quotations, both coaltar and petroleum, may be found under Benzene.

Benzophenone, dms. lb. 1.40 - 1.70
Benzotriazole, tech., dms., 1,000-lb. lots, works lb. 2.25 - —
Benzotrichloride, cbys., 1,000-lb. lots or more, frt., equald lb. .21 - —
cbys, smaller lots, frt., equald. lb. .23 - —
Benzoyl chloride, cbys., dms., c.l., works, frt., equald. lb. .22 - —
cbys., l.c.l., same basis lb. .23 - —
tanktrucks, dlvd. Metropolitan area lb. .21 - —
Benzoyl peroxide, purif., fib. dms., 50 to 1,000-lb. lots, works lb. .93 - 1.08
Benzyl acetate, f.f.c., cns., dms. lb. .58 - .79
Benzyl alcohol, NF, dms. lb. .58 - .80
Tech., dms., dlvd. lb. 47½ - .65
Benzyl benzoate, USP, NF, 40-lb. dms. lb. .53 - —
Benzyl chloride, tech., cbys., dms., c.l., works, frt., equald. lb. .22½ - .25½
cbys., dms., l.c.l., same basis lb. 23½ - 25½
tanktrucks, dlvd., Metropolitan area lb. .21 - —
A 2½c. differential is quoted on benzyl chloride in 5-gal cbys. In steel dms. prices are ½c. lower.
Benzyl cinnamate, cns. lb. 3.30 - 3.60
Benzyl dimethylamine, dms., works. lb. 2.25 - —
Benzyl formate, cns. lb. 1.85 - 2.10
Benzyl isoeugenol, cns. lb. 9.50 - —
Benzyl propionate, bots. lb. 1.35 - 1.65
Benzyl salicylate, bots. lb. 1.60 - 1.85
Benzylidine acetone, bots. lb. 1.75 - 1.80
Benzylidine chloride, (see Benzal chloride).
Berberine bisulfate, cns. lb. 48.50 - —
Berberine hydrochloride, bots. lb. 48.50 - —
Bergamot oil, nat., NF, Italian, cns. lb. 13.00 - 14.00
Betagammapicoline (see b,g-Picoline).
Betahydroxynaphthoic acid (see b-Oxynaphthoic acid).
Betaoxynaphthoic acid (see b-Oxynaphthoic acid)
Betamethylnaphthalene (see b-Methylnaphthalene).
Betanaphthol (see b-Naphthol)
Betanaphthylamine (see b-Naphtholamine)
Betaphenylethylamine (see b-Phenylethylamine).
BHC (see Benzene hexachloride, tech.).
Biotin, cryst., bots. gram 10.00 - —
Biphenyl (see Diphenyl).
Birchtar oil, crude, cns. lb. 1.50 - 1.90
Rectified, cns. lb. 1.75 - 2.00
Bismuth chloride, jars lb. 5.11 - —
Bismuth hydroxide, dms. lb. 4.60 - 4.65
Bismuth metal, bxs. ton lots lb. 2.25 - —
Bismuth nitrate cryst. dms lb. 2.08 - 2.17
Bismuth oxide, anhyd., 100-lb. dm., f.o.b. works lb. 4.42 - —
Bismuth oxychloride, 25-lb. dm., f.o.b. works lb. 4.42 - —
Bismuth subcarbonate, USP, dms. lb. 3.20 - —
Bismuth subgallate, NF, 200-lb. dm., f.o.b. works lb. 3.15 - —
Bismuth subiodide, NF, fib dms lb. 5.37 - —
Bismuth subnitrate, NF, 200-lb. dm., f.o.b. works lb. 2.65 - —
Bismuth subsalicylate, USP, 100-lb. dm., f.o.b. works lb. 3.50 - —
Bismuth-ammonium citrate, USP, powd., jars lb. 4.22 - —
Bisphenol-A, bgs., c.l., t.l., single shipt., 70,000-lbs. or more, frt. alld lb. .29½ - —
bgs., c.l., t.l., less than 70,000 lbs., same basis lb. .30 - —
bgs., l.c.l., same basis lb. .31 - —
Blackberry root bark, bls. lb .50 .55
Black haw root bark, bls. lb 63 .65
Black haw tree bark, bls. lb 45 .50

Black Pigments

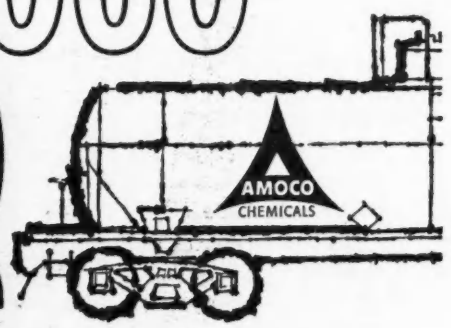
Black pigment quotations are listed individually. For example prices on Black, acetylene, may be found in the A's under Acetylene black.

Blanc fixe, direct process, bgs c.l., works ton 145 00 - —
bgs., l.c.l., works ton 155 00 - —
bgs., l.c.l., New York whse ton 193 00 - —
Blood, dried, 16-16½% ammonia, unit-ton. 6.50 - —
high-grade, unground, 16-17% ammonia, bgs. Chicago unit-ton. 7.00 - —

AMOCO

OXO

ALCOHOLS



HIGHEST ESTERIFICATION QUALITY

Amoco Isooctyl and Decyl Alcohols are triple checked for quality by:

1. High temperature esterifications with phthalic anhydride.
2. Acid color with concentrated sulfuric acid.
3. Esterification color after heat-aging.

Typical Properties	Isooctyl	Decyl
ASTM Distillation, D1078		
Initial Boiling Point, °C.	185	216
Dry Point, °C.	190	220
Specific Gravity, 20/20 °C.	0.833	0.839
Color, APHA	<10	<10
Alcohol, Wt., %	99+	99+
Aldehyde, Wt., %	0.02	0.02
Flash Point (Open Cup), °F.	185	210

In addition to supplying you with top quality Oxo Alcohols, your Amoco sales representative can provide technical service to help you improve your plasticizers. Your inquiry will receive immediate attention.

AMOCO CHEMICALS CORPORATION
910 South Michigan Avenue, Chicago 80, Illinois

Blood, Dried—Cadmium-Selenide Lithopone

Blood, dried, soluble, bgs., c.l. lb .12 - .13
bgs., l.t.l. lb. .14 - .17
bgs., l.t.l. lb. .15 - .30
Bloodroot, bls lb. .48 - .50

Blue Pigments

Blue pigment quotations are listed individually. For example, prices on Blue, ultramarine, may be found in the U's under Ultramarine blue.

Blue dyes (see Dyes)
Blue vitriol (see Copper sulfate)
Bois de rose oil, Brazilian, dms lb. 1.90 - 2.55
Peruvian, dms. lb. 1.80 - 2.25
BON acid maroons, pure, bbls lb. 1.75 - —
Resinated, bbls. lb. 1.50 - —
Bone black, dms., l.c.l. frt. alld lb. .18 - .22¾
Pacific coast bone black prices 2c. per lb. higher.
Bonemeal, steamed, works, E ton.75.00 - —
Bone phosphate, defluorinated of lime (see Defluorinated phosphate).
Bone phosphate, precip. (see Calcium phosphate, tribasic).
Borax, tech., anhyd., 99½%, bgs., c.l., works ton.87.50 - —
bgs., ton lots, ex whse, New York or Chicago 100 lbs. 7.19 - —
bgs., smaller lots, same basis 100 lbs. 8.44 -10.44
bulk, c.l., works ton.78.50 - —
gran., decahydrate 99½%, bgs., c.l., works ton.47.50 - —
bgs., ton lots, ex whse, New York or Chicago 100 lbs. 5.19 - —
bgs., smaller lots, same basis. 100 lbs. 6.44 - 8.44
bulk, c.l., works ton.41.00 - —
gran., pentahydrate, 99½%, bgs., c.l., works ton.63.00 - —
bgs., ton lots, ex whse, New York or Chicago 100 lbs. 5.97 - —
gran., pentahydrate, 99½%, bgs., smaller lots, same basis. 100 lbs. 7.22 - 9.22
bulk, c.l., works ton.56.50 - —
powd., 99½%, bgs., c.l., works. ton.52.50 - —
bgs., ton lots, ex whse, New York or Chicago 100 lbs. 6.34 - —
bgs., smaller lots, same basis. 100 lbs. 7.59 - 9.59
USP borax $15 per ton higher in bags.
Bordeaux powder, tribasic, bgs., c.l., dlvd. lb. .24 - —
bgs., l.c.l., same basis lb. .26 - —
Boric acid, tech., anhyd., 99.9%, bgs., c.l., works ton.335.00 - —
bgs., ton lots, ex whse, New York or Chicago 100 lbs.19.50 - —
Boric acid, tech., anhyd., 99.99% bgs., smaller lots, same basis. 100 lbs.21.75 -23.75
cryst., 99.9%, bgs., c.l., works. ton.160.00 - —
bgs., ton lots, ex whse, New York or Chicago 100 lbs.10.87 - —
bgs., smaller lots, same basis. 100 lbs.12.12 -14.12
dms., c.l., works ton.185.00 - —
dms., ton lots, ex whse, New York or Chicago. 100 lbs.12.12 - —
dms., smaller lots, same basis 100 lbs.12.87 - —
gran., 99.9%, bgs., c.l., works. ton.108.50 - —
bgs., ton lots, ex whse, New York or Chicago 100 lbs. 8.29 - —
bgs., smaller lots, same basis ton.170.75 - —
dms., c.l., works ton.133.50 - —
dms., ton lots, ex whse, New York or Chicago 100 lbs. 9.54 - —
dms., smaller lots, same basis 100 lbs.10.29 - —
bulk, c.l., works ton.102.50 - —
powd., bgs., c.l., works, ton lots, ex whse, New York or Chicago 100 lbs. 8.07 - —
bgs., smaller lots, same basis. 100 lbs. 9.92 -11.92
dms., c.l., works ton.141.00 - —
dms., ton lots, ex whse, New York or Chicago 100 lbs. 9.92 - —
dms., smaller lots, same basis 100 lbs.10.67 - —
USP boric acid $25 per ton higher in bags.
Borneol, cns. lb. 2.75 - —
Boron trichloride, CP, 1,600-lb. cyls., works lb. 1.25 - —
100-lb. cyls., works lb. 1.70 - —
Boron trifluoride gas, cyls, truckload, works lb. .62 - —
cyls., l.t.l., works lb. .70 - —
Brimstone (see Sulfur).
Broenner's acid, bbls. lb. 1.76 - —
Bromine, purif., cs., c.l., t.l., dlvd. E of Rockies lb. .32 - —
c.s., l.c.l., same basis lb. .34 - .39
ret. dms., c.l., t.l., dlvd. E of Rockies lb. .31 - —
ret. dms., l.c.l., same basis lb. .31 - .34
tanks, same basis lb. .21½ - —
Bromochloromethane, dms., c.l., frt. equald lb. .48 - —
dms., l.c.l., same basis lb. .50 - —
tanks, same basis lb. .47 - —
Bromoform, pharmaceutical grade, 100-lb. cbys lb. 1.80 - 1.90
Bromstyrol, bots. lb. 5.45 - 5.70
Brucine, cns. oz. 1.50 - 1.75
Brucine sulfate, NF, cns. oz. 1.50 - 1.75
Buchu leaves, bls. lb. .95 - 1.05

Brown Pigments

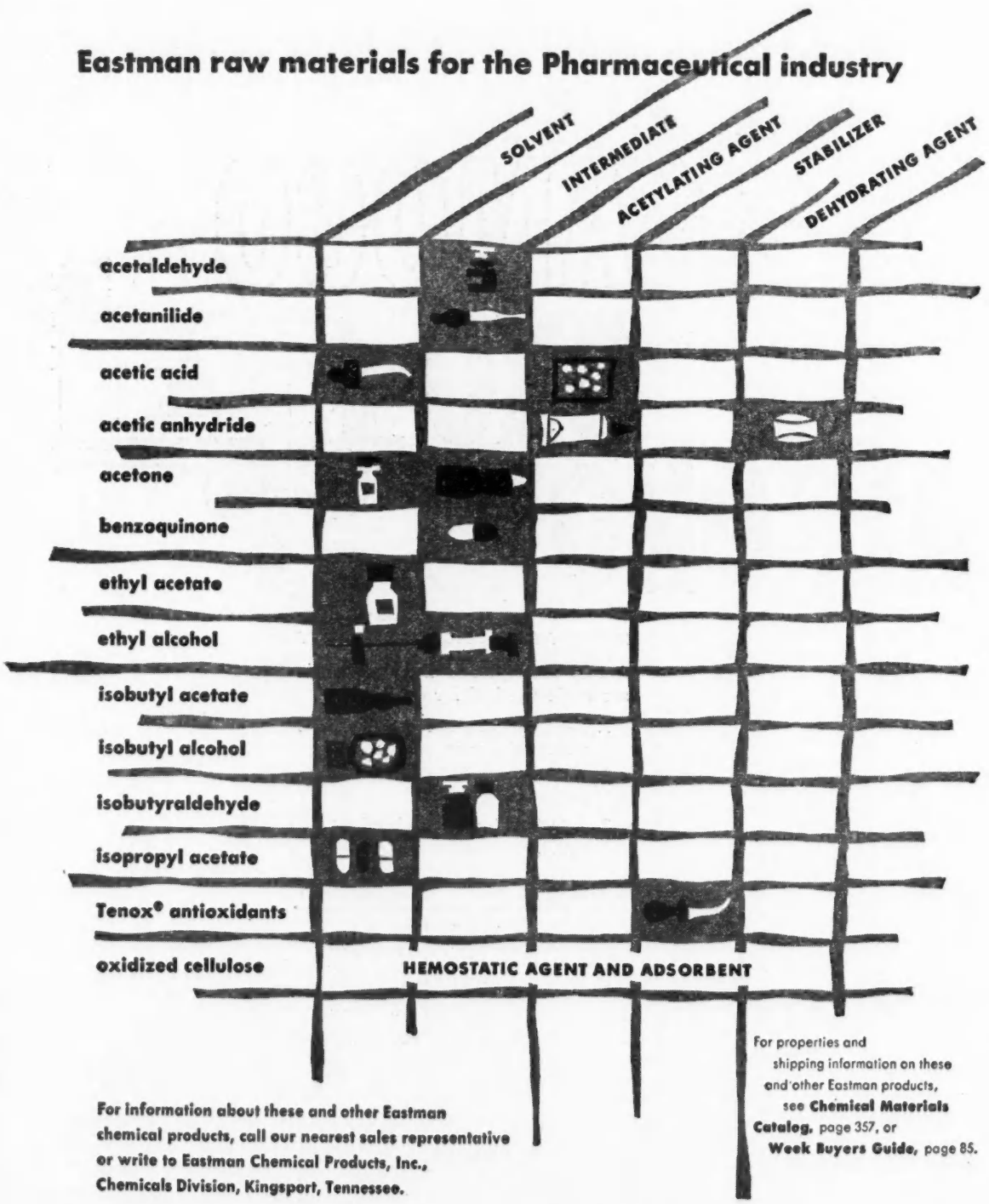
Brown pigment quotations are listed individually. For example, prices on Brown, iron oxide, may be found in the I's under Iron oxide brown.

Butadiene, refd. cyls., c.l., refy lb. .21 - —
cyls., l.c.l., refy lb. .22 - —
tanks, dlvd. lb. .14½ - —
n-Butyl acetate, ferment, dms., c.l., frt. alld lb. .17 - —
dms., l.c.l., same basis lb. .18½ - —
tanks, same basis lb. .14½ - —
Syn., dms., c.l., dlvd. E lb. .17 - —
dms., l.c.l., same basis lb. .18½ - —
tanks, same basis lb. .14½ - —
sec-Butyl acetate, syn., dms., c.l., dlvd.E lb. .14¾ - —
dms., l.c.l., same basis lb. .16¼ - —
tanks, same basis lb. .12¼ - —
n-Butyl acrylate, dms., c.l. or t.l., straight or mixed frt. alld. E. lb. .47½ - —
dms., l.t.l., same basis lb. .48½ - —
tanks, same basis lb. .45 - —
Prices of n-butyl acrylate are 1c. per lb. higher in Ariz., Calif., Idaho, Nev., Ore., Utah and Wash.
n-Butyl alcohol, ferment, dms., c.l., frt. alld lb. .17 - —
dms., l.c.l., frt. alld lb. .18½ - —
tanks, frt. alld lb. .14½ - —
Syn., dms., c.l., dlvd lb. .17 - —
dms., l.c.l., frt. alld lb. .18½ - —
tanks, dlvd lb. .14½ - —
Butyl alcohol, sec-synthetic, dms., c.l., dlvd lb. .15 - —
dms., l.c.l., dlvd lb. .16½ - —
tanks, dlvd lb. .12½ - —
Butyl alcohol, tert-synthetic, dms., c.l., frt. alld. dlvd. E lb. .15 - —
dms, l.c.l., same basis lb. .16½ - —
tanks, same basis lb. .12½ - —
Butyl aldehyde (see Butyraldehyde).
Butyl chloride, dms., c.l., works lb. .37½ - —
dms., l.c.l., works lb. .38¼ - —
n-Butyl ether, dms., c.l., works lb. .35¼ - —
dms., l.c.l., works lb. .36 - —
tanks, works lb. .33¼ - —
Butyl lactate, dms., c.l., frt. alld. E. of Rockies lb. .42½ - —
dms., l.c.l., same basis lb. .43½ - —
tanks, same basis lb. .40 - —
Butyl taurate, dms., works lb. .37½ - —
Butyl methacrylate, dms., c.l., t.l., works lb. .53 - —
dms., l.c.l., works lb. .55½ - —
Butyl oxeate, refd., dms., l.c.l., works lb. .32 - —
Butyl phenylacetate, dms. lb. 4.50 - 4.60
Butyl phthalate (see Dibutyl phthalate).
Butyl stearate, dms., c.l., frt. alld. E. of Mississippi lb. .27¼ - —
dms., l.c.l., same basis lb. .28¼ - —
Butylamine (see Mono-, Di- and Tributylamine).
6-tert-Butyl-m-cresol (see mono-tert-m-cresol).
Butylated hydroxytoluene (see 2,6-Di-tert-butyl-p-cresol).
p-tert-Butylphenol, bgs., c.l., dlvd. lb. .27½ - —
bgs., l.c.l., works lb. .28½ - —
Butyraldehyde, dms., c.l., dlvd lb. .22 - —
dms., l.c.l., dvld. lb. .23½ - —
tanks, dlvd. lb. .19½ - —
Butyric acid, 99%, dms., c.l., frt. equald lb. .34 - —
dms., l.c.l., same basis lb. .34½ - —
tanks, same basis lb. .32½ - —
Butyric ether (see Ethyl butyrate).

C

Cacao butter (see Cocoa butter)
Cadmium CP red, dark shade, bbls., frt. alld. E. of Rockies lb. 5.35 - —
Light shade, bbls., same basis lb. 4.45 - —
Medium shade, bbls., same basis. lb. 5.10 - —
Medium light shade, bbls., same basis lb. 4.70 - —
Orange-red shade, bbls., same basis lb. 4.10 - —
Yellow, all shades, bbls., frt. alld. E. of Rockies lb. 3.65 - —
Cadmium iodide, 25-lb fib. dms. lb. 6.75 - 7.00
Cadmium metal, ingots or sticks, cs., dlvd lb. 1.30 - —
Cadmium-mercury lithopone orange, deep shade, bbls., frt. alld. E. of Rockies lb. 1.58 - —
Cadmium-mercury lithopone red, dark shade, bbls., same basis. lb. 1.88 - —
Red, light shade, bbls., same basis. lb. 1.65 - —
Red, medium shade, bbls., same basis lb. 1.80 - —
Red, medium light shade, bbls., same basis lb. 1.73 - —
Red, maroon shade, bbls., same basis lb. 1.96 - —
Cadmium-selenide lithopone maroon, bbls., frt. alld. E. of Rockies. lb. 2.69 - —
Maroon, dark shade, bbls., same basis lb. 2.74 - —
Orange, bbls., same basis lb. 1.51 - —
Cadmium-selenide lithopone red, orange-red shade, bbls., same basis lb. 1.59 - —
Red, light shade, bbls., same basis. lb. 1.81 - —
Red, medium-light shade, bbls., same basis lb. 1.93 - —
Red, medium shade, bbls., same basis lb. 2.16 - —
Red, dark shade, bbls., same basis. lb. 2.49 - —
Cadmium-selenide, lithopone yellow, all shades, bbls., frt. alld. E. of Rockies lb. 1.12 - —

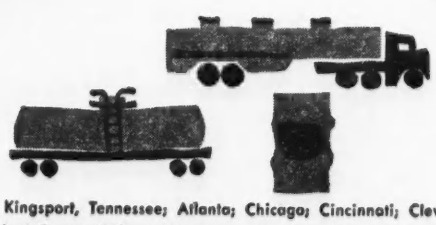
Eastman raw materials for the Pharmaceutical industry



For properties and shipping information on these and other Eastman products, see **Chemical Materials Catalog**, page 357, or **Week Buyers Guide**, page 85.

For information about these and other Eastman chemical products, call our nearest sales representative or write to Eastman Chemical Products, Inc., Chemicals Division, Kingsport, Tennessee.

Eastman
CHEMICAL PRODUCTS, INC.
KINGSPORT, TENNESSEE
subsidiary of EASTMAN KODAK COMPANY



SALES OFFICES: Eastman Chemical Products, Inc., Kingsport, Tennessee; Atlanta; Chicago; Cincinnati; Cleveland; Framingham, Massachusetts; Greensboro, N. C.; Houston; New York City; St. Louis. **West Coast: Wilson Meyer Co.,** San Francisco; Los Angeles; Portland; Salt Lake City; Seattle.

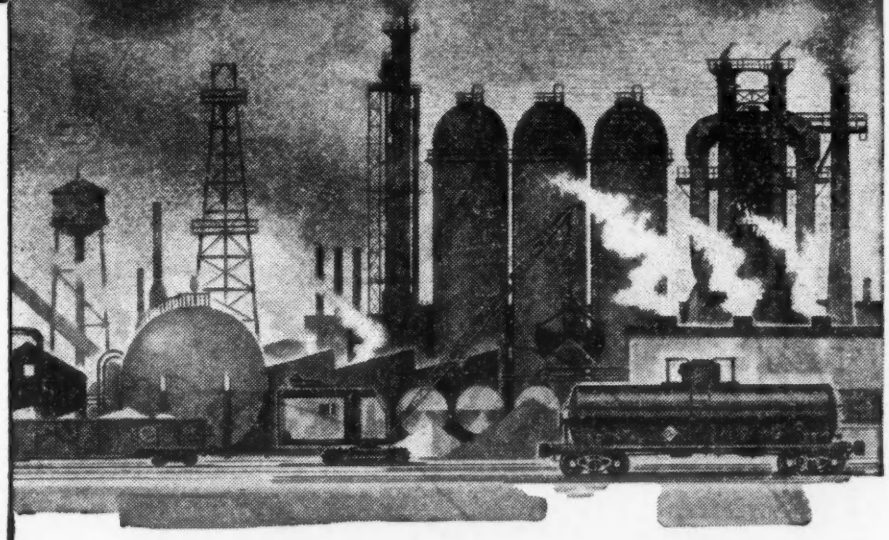
Caffeine, NF, citrated, dms., 100-lb. lots or more lb. 2.70 - —
USP, nat., cryst., anhyd., 100-lb. lots or more lb. 2.10 - —
nat., cryst., hydrous, dms., 100-lb. lots or more lb. 1.96 - —
syn., cryst., anhyd., dms., 100-lb. lots or more lb. 2.10 - —
cryst., hydrous, dms., 100-lb. lots or more lb. 1.96 - —
Cajuput oil, native, cns. lb. 1.75 - 2.55
Redist., USP, cns lb. 1.90 - 2.10
Calamine, USP, dms. lb. .34 - —
Calamus oil, bots lb. 12.00 -20.00
Calciferol, cryst., 10-kilo or more lots, works gram. .54 - —
1-10 kilo lots gram. .55 - —
Calciferol, in edible oil (see Viosterol).
Calcium p-aminosalicylate, trihydrate, fib. dms., 100 lbs. or more, frt. adjusted lb. 3.10 - —
Calcium arsenate, dealers, bgs., c.l., frt. alld lb. .09 - .09¼
bgs., l.c.l., same basis lb. .10 - .10½
Calcium bromide, NF, 100 lbs. or more lb. .97 - —
Calcium carbide, standard generator size, 600-lb. dms., c.l., dlvd ton. 149.00 - —
Calcium carbonate, nat., dry-grd., air floated, 325 mesh, bgs., c.l., works ton. 10.50 - —
chalk, whiting, 325 mesh, bgs., c.l., works ton. 32.00 -34.00
water-grd., ½ to 10 microns, bgs., c.l., works ton. 30.00 - —
10 to 20 microns, bgs., c.l., works ton. 17.00 -18.00
Calcium carbonate, precip., dense, bgs. c.l., works ton. 30.00 -35.00
bgs., l.c.l., works ton. 45.00 -50.00
medium, bgs., c.l., works ton. 38.00 - —
bgs., l.c.l., works ton. 48.00 - —
Calcium carborate, precip., surface treated, bgs. c.l., works. ton. 40.00 -42.00
bgs., l.c.l., works ton. 55.00 -57.00
ultrafine, bgs., c.l., works. ton. 117.50 167.50
bgs., l.c.l., works ton. 137.50 -187.50
Calcium chloride, flake, 77-80%, paper bgs. c.l., works, frt. equald ton. 31.00 - —
Conc., flake or pellet, 94-97%, paper bgs., c.l., works, frt. equald ton. 37.80 - —
Powd., 77% min., paper bgs., c.l., works, frt. equald ton. 37.00 - —
Purif., gran., dms. lb. .27 - —
USP, gran., dms. lb. .32 - —
Liquor, 40%, tanks, frt. equald. ton. 12.50 - —
Solid, 73-75%, dms., c.l., frt. equald ton. 29.50 - —
dms., l.c.l., works, frt. equald. ton. 36.00 -73.00
Calcium chromate, bgs., dlvd lb. .37 - —
Calcium cyanide, dms., c.l., dlvd. E. of Rockies lb. .20 - —
dms., l.c.l., same basis lb. .24 - .55
Calcium cyclamate 100-lb dms lb. 1.95 - —
Calcium gluconate, USP, powd., 150-lb. dm., ton lb. .66½- —
AA, 150-lb. dm., ton lb. .73½- —
Calcium hydride, lump, dms., works. lb. 2.20 - 3.00
Calcium hypochlorite, high test, 45-lb cs., dlvd. E. of Rockies. cs. 22.95 -25.10
100-lb. dms., same basis dm. 30.80 -34.50
Calcium hypophosphite dms., 1,000-lb lots lb. 1.28 - —
Calcium iodide, jars lb. 4.52 - —
Calcium lactate, NF, dms., 10,000-lb. lots or more, works lb. .36 - .40
dms., smaller lots, works lb. .41 - .48
Calcium mandelate, USP, dms., works lb. 2.10 - 2.25
Calcium naphthenate, liq., 4% Ca., dms. frt equald lb .30 - —
Calcium pantothenate, 1-kilo or more. kilo. 35.00 - —
Calcium para-aminosalicylate (see Calcium p-aminosalicylate).
Calcium phenolsulfonate, dms lb. 1.24 - 1.25
Calcium phosphate, dibasic, USP, bgs., c.l., frt equald 100 lbs. 8.25 - —
Calcium phosphate, dibasic, feed grade, 18½% P, bgs., c.l., t.l., frt. equald ton. 83.25 - —
bgs., c.l., t.l., f.o.b. Texas City works ton. 77.70 - —
bgs., l.c.l., frt. equald ton. 93.25 - —
21% P., bgs., c.l., t.l., frt. equald. ton. 94:50 - —
bgs., l.c.l., frt. equald ton. 104.50 - —
Prices of calcium phosphate dibasic in bulk $3 per ton less than bg., c.l. prices
Calcium phosphate, monobasic, bgs., 10,000-lb. lots, frt. equald, 100 lbs. 7.45 - —
bgs., smaller lots, same basis, 100 lbs. 7.95 - —
Calcium phosphate, tribasic, NF, precip., bgs., c.l., works, frt. equald 100 lbs. 9.25 - —
bgs., l.c.l., frt. equald, 100 lbs. 10.00 - —
Calcium phytate bgs., works lb. .50 - —
Calcium resinate precip, dms ton lots, frt. alld., works lb. .36¼- —
Calcium silicate, hydrated, bgs., c.l., works lb. .06 - —
bgs., l.c.l., works lb. .06½- —
Calcium silicate, paint grade (see Wollastonite).
Calcium stearate, ctns., c.l. lb. .39 - —
ctns., l.c.l. lb. .40 - .44
Calcium sulfate (see Gypsum)
Calomel, NF X, powd., 100-lb. dms. lb. 5.42 - —
Camphene 46° m.p., dms incl., c.l., works lb. .15 - —
dms. incl., l.c.l., same basis lb. .16¼- —
tanks, same basis lb. .12½- —
Camphene, chlorinated 67-69% (see Toxaphene)
Camphor, monobromated, NF, dms., kgs lb. 3.63 - 3.70
Camphor, nat., USP, powd., cs., 100-lb. lots lb. .60 - .65
tablets, 1-oz. cs. lb. .85 - .90
USP, gran., powd., bbls., 2,000-lb. lots lb. .59 - —
Syn., USP, gran., powd., bbls., 1,000-lb. lots lb. .60 - —
bbls., smaller lots lb. .61 - —
tablets, ctns., 1,000-lb. lots lb. .85 - —
ctns. 500-lb. lots lb. .86 - —
ctns. smaller lots lb. .87 - —
tech., 1 bbl. or more lb. .48 - —
Camphor oil, sassafrassy, dms. lb. .35 - .55
White, dms. lb. .26 - .50
Cananga oil, native, cns. lb. 6.50 - 7.00
Rectified, cns. lb. 8.25 -10.00
Candelilla wax, crude, bgs. lb .53 - .54
Refd., bgs. lb. .57 - .59
Powdered Candelilla wax 20 to 100 mesh, 8c. higher
Cantharides, Chinese, cs. lb. 1.25 - —
powd., bxs. lb. 1.75 - —
Russian, bgs. lb. 2.25 - —
powd., bxs. lb. 2.75 - —
Capric acid, dms. lb. .35½- .38
tanks lb. .33 - —

Capryl alcohol, 85% dms., c.l., and t.l., works lb. .19 - —
dms., l.t.l., same basis lb. .19½- —
tanks, frt. equald lb. .16½- —
Sec. 92-99%, dms., c.l. lb. .22 - —
dms., l.c.l. lb. .23 - —
tanks lb. .19½- —
Caprylic acid, dms lb. .35½- .38
tanks lb. .33 - —
Capsicum (see Pepper red).
Capsicum oil (see Capsicum oleoresin).
Capsicum oleoresin, NF, from dom. pepper, dms lb. 4.00 - 4.75
NF, from African pepper, dms lb. 4.50 - 5.25
Caraway oil, dms lb. 3.10 - 3.50
Caraway seed, Danish, bgs lb. .12¼- —
Dutch, bgs. lb. .13¼- —
Polish, bgs. lb. .12 - —
Carbazole, 97%, bbls., ton lots, works lb. 1.05 - —
Carbon black, channel, rubber beads, bulk, c.l., works lb. .07¼- —
bgs., c.l., works lb. .07¾- —
bgs., l.c.l., works lb. .15½- —
Carbon black, furnace, fast extruding, bgs., c.l., works lb. .06¾- —
ctns., l.c.l., whse. lb. .13½- —
high abrasion bulk, c.l., works. lb. .07¼- —
bgs., c.l., works lb. .07¾- —
bgs., l.c.l., dlvd. or whse lb. .14½- —
high modulus, bgs., c.l., works. lb. .06¼- —
ctns., l.c.l., whse. lb. .13 - —
semi-reinforcing, bgs., c.l., works. lb. .05¾- —
bgs., ctns., l.c.l., whse. lb. .12½- —
Carbon black, pigment, high color beads, ctns., c.l., works lb. .72 - —
ctns., l.c.l., dlvd. or whse lb. .79 - —
medium color, uncompressed, bgs., c.l., works lb. .13½- —
bgs., l.c.l., dlvd. or whse lb. .22 - —

Carbon dioxide indust. wholesale, bulk, dlvd., Metropolitan area ton. 73.00 -115.00
50-lb. cyls., dlvd. lb. .09 - .11
Solid, bulk, wholesale, works ton. 85.00 - —
Carbon disulfide, 55-gal. dms., c.l., works, frt. equald to competitive points lb. .071 - —
55-gal. dms., l.c.l., same basis lb. .086 - .091
5-gal. dms. 30 dms. to c.l., same basis lb. .131 - —
5-gal. dms., less than 30 dms., same basis lb. .161 - —
tanks, dlvd. lb. .0545- —
Carbon tetrachloride, CP, consumers, dms., c.l., frt. alld lb. .12¾- —
dms., l.c.l., frt. alld. lb. .15¼- —
Carbon tetrachloride, tech., consumers, dms., c.l. t.l., frt. alld. lb. .11¾- —
dms., l.c.l., t.l., frt. alld lb .14¼- —
tanks, frt. alld. lb. .10¾- .11¼
Carboxymethyl cellulose (see CMC).
Carbromal, NF, dms., 100-lb. lots, works lb. 4.00 4.25
dms., smaller lots, works lb. 4.10 4.75
Cardamom oil, NF, bots. lb. 42.00 -50.00
Cardamom seed, bleached "A" lb. 2.95 - —
Bleached "B" lb. 2.95 - —
Decorticated Alleppey, cs lb. 2.85 - —
Guatemala, cs. lb. 2.85 - —
Green, Alleppey, bgs. lb. 2.05 - —
Ceylon, bgs. lb. 2.00 - —
Carmine No. 40, NF, bulk, 100-lb lots or more, dlvd. lb. 16.80 —
bulk, smaller lots, dlvd. lb. 16.90 -17.30

Carnauba wax, chalky, bgs., ton lots lb. .70 - .72
North country, No. 2, crude, bgs., ton lots lb. .82 Nom.
Refd., pure, ton lots lb. .92 - .94
North country, No. 3, Ceara, crude, bgs., ton lots lb. .74 - .76
Ceara, refd., pure bgs., ton lots lb. .83 - .84
Parnahyba, crude, bgs., ton lots lb. .76 .78
Parnahyba, refd., pure, bgs., ton lots lb. .83 - .84
Yellow, No. 1, Ceara, bgs., ton lots lb. 1.10 1.12
Parnahyba, bgs., ton lots lb. 1.12 - 1.14
Powdered carnauba wax 20 to 100 mesh, 8c. higher.
Carotene, tech., 1,350,000 A units per gram, tins 5-10 kilo lots, dlvd gram .24½ —
in carrot oil, 5,000,000 to 8,000,000 A units per lb., dms., works million units .12 - —
USP, microcrystalline in oil, 400,000 A units per gram, dms., dlvd million units .174 - —
b-Carotene in vegetable oil, semi-solid suspension 400,000 A units per gram, cns kilo. 57.60 - —
Liquid in vegetable oil, 500,000 A units per gram, cns kilo. 72.00 - —
Pure, cryst., 1,600,000 to 1,670,000 A units per gram., cns kilo. 240.00 - —
Carvol, bots. lb 5.00 5.40

IS YOUR INDUSTRY LISTED HERE?



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Fertilizer
Food
Glass
Insecticide and Fungicide
Laundry
Leather
Lithographing
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Lubricant
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Metallurgical
Metal Working
Oil Cloth
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Cascara Sagrada Bark—Chrome Green

Cascara sagrada bark, bulk ..... lb .30 - —
Casein, dom., edible, acid precip., 30 mesh, bgs., 10,000-lb. lots or more, works lb. .56 - —
edible, acid, precip., 80 mesh, bgs., 10,000-lb lots or more, works lb. .64 - —
Imp. inedible, acid-precip grd., Argentine, bgs., c.l., ex-dock, Eastern seaports lb. .19¼- .19½
New Zealand, bgs., c.l., same basis lb. .24 - .24½
Cashewnut shell liquid, treated dms., c.l., Newark, N. J. lb. .22 - —
dms., ton lots, same basis lb. .23 - —
dms., dm. lots, same basis lb. .25 - —
Cassella acid, dms., frt. alld., 100% basis lb. 1.44 1.75
Cassia, Padang, "A," bls ..... lb. .30 - —
"B," bls. ..... lb. .29 - —
"C," bls. ..... lb. .28 - —
Korintje "A," bls. ..... lb. .29 - —
"B," bls. ..... lb. .28½- —
"C," bls. ..... lb. .27½- —
Cassia oil (see Cinnamon leaf oil, USP).
Castor oil, dom., blown, dms. c.l. lb. .2550- —
dms., l.c.l. ..... lb. .2650- —
dehydrated, bodied, dms. c.l. lb. .2700- —
dms., l.c.l. ..... lb. .2850- —
tanks ..... lb. .2500- —
Castor oil, dom., dehydrated, unbodied, dms., c.l., ... lb. .2500- —
dms., l.c.l. ..... lb. .2660- —
tanks ..... lb. .2360- —
hydrogenated, bgs., ton lots lb. .2750- —
bgs., l.c.l., dlvd ..... lb. .2950- —
No. 1, dms., c.l. ..... lb. .2150- —
dms., l.c.l. ..... lb. .2250- —
tanks ..... lb. .1950- —
No. 3, tech., dms., c.l. ..... lb. .2125- —
dms., l.c.l. ..... lb. .2225- —
tanks ..... lb. .1925- —
Refd. and deodorized, dms., c.l. lb. .2650- —
dms., l.c.l. ..... lb. .2750- —
Castor oil, No. 3, USP, dms., c.l. lb. .2350- —
dms., l.c.l. ..... lb. .2450- —
tanks ..... lb. .2150- —
Imp., No. 1, Brazilian, tanks lb. .15¾- .16
Castor oil, sulfonated, 50%, dms., works lb. .15 - .15¼
75%, dms., works ..... lb. .19 - .19½
Castor oil acids, dehydrated, dms. lb. .44¼- .46¼
Split, dms. ..... lb. .37¼- .38¼
Castor pomace, bgs., c.l., works ton. 35.00 - —
Castoreum, nat., cns. ..... lb. 5.25 - —
Syn., cns. ..... lb. 9.00 - —
Catechol, CP, cryst., fib., dms., works lb. 2.17½- —
Resub., dms., works ..... lb. 4.29¼- —
Catnip leaves, Southern, bls ..... lb. .65 - .75
Caustic potash (see Potash caustic).
Caustic soda (see Soda, caustic).
Cedarleaf oil, USP XIII cns., dms. lb. 2.65 - 3.75
Cedarwood oil, cns., dms. ..... lb. .51 - .65
Celery seed, French, bgs ..... lb. .33 - —
Indian, bgs. ..... lb. .19 - —
Cellulose acetate, flake, powd., bgs. ctns., 100-lb. lots or more, dlvd., E. lb. .35 - .45
Cellulose acetate-butyrate, powd., 17% butyryl content, bgs., dlvd. E lb. .545 - .555
27% butyryl content, bgs., dlvd. E lb. .595 - .605
Cellulose acetate-butyrate, 38% butyryl content, bgs., dlvd. E. lb. .545 - .555
38% butyryl content, half-second, bgs., dlvd. E lb. .545 - .555
50% butyryl content, bgs., dlvd., E lb. .585 - .595
Cellulose gum, methyl (see Methyl Cellulose).
Cellulose gum, pure, high vis., bgs., 23,000-lb lots or more works, frt. alld lb. .57 - —
bgs, smaller lots, same basis. lb. .59 - —
Cerium chloride, 43%, dms., dlvd lb. .25 - —
Cerium hydrate, 74% CeO fib. dms., 100-lb. lots or more lb. 1.40 - —
77% CeO, fib. dms. 100-lb. lots or more lb 1.74 - —
Cerium oxalate (see Rare earth oxalate).
Cerium oxide, optical grade, bgs., 50-lb. lots or more, dlvd lb. 1.85 - 1.90
bgs., smaller lots, dlvd. ..... lb. 1.95 - —
Cetyl alcohol, NF, special, fib. cns., c.l., t.l., dlvd. E lb. .48½- —
fib. cns., l.c.l., same basis lb. .50½- —
tanks, same basis ..... lb. .46 - —
Cetyl alcohol, NF, fib. cns., c.l., t.l., dlvd. E. lb. .41½- —
fib. cns., l.c.l., same basis ... lb. .43½- —
tanks, same basis ..... lb. .39 - —
Chalk (see Calcium carbonate).
Chamomile flowers, Hungarian, bls. lb. 2.00 - 2.25
Roman, cs. ..... lb. 1.50 - —
Chamomile oil, blue Hungarian, bots lb. 350.00 - —
Charcoal, activated, NF, fib dms. c.l., works lb. .25 - .32
fib. dms., 5-ton lots, works lb. .26½- .32½
fib. dms., smaller lots, works lb. .27 - .50
Charcoal, black (see Charcoal, activated).
Charcoal, bone (see Bone black).
Charcoal, hardwood, lump bulk, c.l., f.o.b. plant ton. 55.00 - —
briquets, bulk, c.l., f.o.b. plant. ton. 78.00 - 80.00
Charcoal, hardwood, briquets, 5-lb. paper bgs., c.l., same basis. ton. 106.00 - —
25-lb. paper bgs., c.l., f.o.b. plant ton. 87.00 - —
40-lb. paper bgs. c.l., same basis ton. 84.00 - —
Chenopodium oil, NF, cns. ..... lb. 4.15 - 5.00
Chicago acid paste, bbls. frt. alld. lb. 3.21 - —
Chinawood oil (see Tung oil).
Chloral, tech, 94% min., dms., c.l., works lb. .23 - —
dms., l.c.l., works ..... lb. .24 - —
tanks, multiple units, 5 cars, works lb. .21 - —
Chloral hydrate, USP, jars, 1,000-lb lots lb. 1.00 - —
jars, 500-lb. lots. ..... lb. 1.03 - —
jars, 100-lb lots or less ..... lb. 1.05 - —
Chlordan, agricultural, dms., c.l., frt. alld lb. .65 - —
dms. l.c.l. 5,000 to 10,000-lb. lots, frt. alld lb. .66 - —
Chlordan, clarified, dms. c.l., frt. alld lb. .69 - —
dms., l.c.l., 5,000-10,000-lb lots, frt. alld lb. .70 - —
Chlorinated paraffin, 42%, dms., c.l. frt. alld lb. .16¼- —
dms. l.c.l. 10 dms. or more, same basis lb. .17¼- —
Chlorinated paraffin, 70%, dms., c.l., same basis lb. .18½- —
dms. l.c.l. 10 dms. or more, same basis lb. .19½- —
Chlorinated rubber, 5, 10, 20 cps., ctns., c.l., works lb. .60 - —
ctns., l.c.l., works ..... lb. .61 - —
Chlorinated rubber, 125, 1,000 cps., ctns., c.l., works lb. .70 - —
ctns., l.c.l., works ..... lb. .71 - —
Chlorine, liq., cyls., c.l., works, frt. equald lb. .11 - —
cyls., l.c.l. Metropolitan area lb. .12½- .13¾
tanks, single units, works, frt. equald 100 lbs. 3.15 - —
tanks, multiple units, 5 cars, works, frt. equald 100 lbs. 4.05 - —
tanks, multiple units, 4 cars, same basis 100 lbs. 4.25 - —
tanks, multiple units, 2 cars, same basis 100 lbs. 5.25 - 5.75
tanks, multiple units, 1 car, same basis 100 lbs. 6.25 - 7.25
Chloroacetic acid, mono, flake, 99%, dms. c.l lb. .23½- .25¼
dms., l.c.l. ..... lb. .24½- —
tech. flake, 96-97%, dms., c.l., frt. equald lb. .19 - —
dms., l.c.l., frt. equald lb. .20 - —
2-Chloro-4-aminotoluene, tech., liq., dms., frt. alld lb. 1.03 - —
4-Chloro-2-aminotoluene, fused, bbls. lb. 1.45 - —
6-Chloro-2-aminotoluene, tech., liq., dms., frt. alld lb. .66 - —
m-Chloroaniline, dms., c.l., frt. alld. lb. .75 - —
dms., l.c.l., same basis ..... lb. .77 - —
tanks, same basis ..... lb. .73 - —
o-Chloroaniline, dms., c.l., frt. alld. lb. .52 - —
dms., l.c.l., same basis ..... lb. .54 - —
tanks, same basis ..... lb. .50 - —
p-Chloroaniline, dms., c.l., frt. alld. lb. .77 - —
dms., l.c.l., same basis ..... lb. .79 - —
o-Chlorobenzaldehyde, dms., t.l., works, dlvd. to N.Y. Metropolitan area lb. 1.05 - —
dms., t.t.l., same basis ..... lb. 1.20 - —
p-Chlorobenzaldehyde, dms., l.c.l., works, dlvd. to N. Y. Metropolitan area lb. 1.95 - —
o-Chlorobenzoic acid, fib. dms., t.l., works lb. 1.10 - —
fib. dms., smaller lots, works lb. 1.25 - —
p-Chlorobenzoic acid, fib. dms., 2,000-lbs. or more, works. lb. 2.25 - —
fib. dms., less than 2,000-lbs., same basis lb. 2.30 - —
Chloroform, tech., dms., c.l., dlvd. E lb. .18 - —
dms., l.c.l., same basis ..... lb. .19 - —
tanks, same basis ..... lb. .17 - —
USP, dms., c.l., dlvd ..... lb. .27 - —
dms., l.c.l., dlvd ..... lb. .30 - —
tanks, minimum 4,000 gals., dlvd. lb. .25 - —
2-Chloro-4-nitroaniline, paste, dlvd. E. 100% basis lb. .81 - —
Powd, dlvd. E. 100% basis ... lb. .86½- —
4-Chloro-2-nitroaniline, powd., dlvd. E lb. .80½- —
4-Chloro-2-nitrophenol, tech., paste, dms., frt. alld lb. .75 - —
4-Chloro-2-nitrotoluene, tech., solid, dms., frt. alld lb. .99 - —
6-Chloro-2-nitrotoluene, tech., solid, dms., frt. alld lb. .17 - —
o-Chlorophenol, dms., c.l., frt. equald lb. .37 - —
dms., l.c.l., same basis ..... lb. .38 - —
p-Chlorophenol, dms., c.l., frt. equald lb. .37 - —
dms., l.c.l., same basis ..... lb. .38 - —
Chloropicrin, coml., cyls., 180 lbs., frt. alld lb. 1.07 - —
cyls., 100 lbs., same basis ... lb. 1.08 - —
cyls., 50 lbs., same basis ... lb. 1.14 - —
Chlorosulfonic acid, dms., c.l., frt. equald lb. .0465- —
dms., l.c.l., frt. equald ..... lb. .0515- —
tanks, frt. equald ..... lb. .0415- —
Chlorosulfonic acid, in stainless steel dms. ½c. per lb higher
o-Chlorotoluene, tech., dms., t.l., works lb. .37 - —
dms., l.c.l., l.t.l., same basis lb. .38 - —
Choline bitartrate, fib dms., frt. adjusted kilo. 2.75 - 3.00
Choline chloride, fib. dms., frt. adjusted kilo. 2.75 - 3.00
Choline dihydrogen citrate, fib. dms., frt. adjusted kilo. 2.75 - 3.00
Chrome green, CP, dark, light medium blue content 1-15%, bbls., dlvd. E. of Rockies lb. .40 - .42
blue content 16-30%, bbls., same basis lb. .40 - .42
blue content 31-45%, bbls., same basis lb. .41 - .43

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Chrome green, CP, dark, light, medium, blue content 45-49%, bbls., same basis . lb. .44 - .46
Reduced color, 25% . lb. .19 - .20
Chrome green prices 1c. higher W. of Rockies.
Chrome orange, CP, bbls., dlvd. E. of Rockies lb. .31½ - —
Chrome orange prices 1c. higher W. of Rockies.
Chrome yellow, CP, bbls., dlvd. E. of Rockies lb. .31½ - —
Chrome yellow price 1c. higher W. of Rockies.
Chromic acid, 99¾%, dms., c.l., works, frt. equald lb. .29½ - —
dms., l.c.l., dlvd. N. Y. Metropolitan area lb. .30 - .31
Chromic acid, NF (see Chromium trioxide).
Chromium acetate, soln., 7½%, NF, yellow, broken, bgs. lb. .35 - .40
dms., 500-2,000-lb. lots, works. lb. .10 - —
Chromium oxide, hydrated, bbls., fib. dms., c.l., frt. alld lb. 1.20 - —
Pure, bgs., c.l., frt. alld. lb. .44½ - —
bgs., l.c.l., same basis lb. .45¼ - —
Chromium trioxide, NF, bots lb. 1.15 - —
Cinchona bark, NF, red, broken, bgs lb. .25 - —
Chromium fluoride, bbls., works lb. .51 - .52
Cinnamic acid, refd. bots. lb. 2.50 - 3.50
Cinnamic alcohol, bots. lb. 1.90 - 2.20
Cinnamic aldehyde, dms lb. .92 - 1.25
Cinnamon, Ceylon No. 2, bgs lb. .74 - —
Ceylon No. "0000" bgs. lb. .85 - —
Cinnamon bark oil, bots lb. 36.00 - 70.00
Cinnamon leaf oil, crude, dms lb. 1.35 - 2.00
USP (Cassia), cns., dms lb. 8.50 - 13.50
Citral, CP, bots lb. 2.85 - 3.25
Extra, bots. lb. 3.45 - 5.05
Citric acid, USP, anhyd., fine gran., bgs., dms., c.l lb. .29½ - .30
bgs., dms., 10,000-lb. lots, 1 shipt lb. .30 - .30½
bgs., dms., smaller lots lb. .30½ - .31
Citric acid, USP, hydrous, fine gran. bgs., dms., c.l lb. .27½ - .28
bgs., dms., 10,000-lb. lots, 1 shipt lb. .28 - .28½
bgs., dms., smaller lots lb. .29 - .29½
Powdered citric acid ½c. per lb. higher.
Citronella oil, Ceylon, dms lb. .53 - .95
Java-type, dms. lb. .52 - .95
Citronellol, bots., dms lb. 2.30 - 3.30
Civet, artif., bots. lb. 13.75 - 15.00
Nat., bots. oz. 6.50 - 15.00
Clay, ball, dom., airfloated, bgs., c.l., Tenn ton. 17.50 - 21.50
crushed, shed moisture, bulk, c.l. Tenn ton. 8.00 - 11.00
Clay, ball, imp., airfloated, bgs, c.l., Atl. port net-ton. 42.00 - 45.75
lump, bulk, Atl. port net-ton. 29.50 - 35.75
Clay, China, dom., dry-grd., airfloated, 99%, 325 mesh, Georgia, bgs., c.l., works. ton. 10.00 - 12.00
Georgia, bgs., l.c.l. works. ton. 15.50 - —
Clay, China, dom., airfloated, 99%, 300 mesh bgs., c.l., Georgia, works ton. 13.50 - 14.50
bgs., l.c.l., ex-whse ton. 35.00 - 36.00
Clay, China, imp., white, lump, bulk, c.l., ex dock, Philadelphia, Portland, Me long-ton. 20.00 - 35.00
powd., bgs., c.l., ex dock, net-ton. 50.00 - —
bgs., l.c.l., ex whse net-ton. 60.00 - 70.00
Cleaner's naphtha, petroleum, 140°F, flash, tanks, east coast, New Jersey and New York gal. .18 - —
tanks, group 3 gal. .15 - .15½
tanks, Houston, Tex. gal. .19 - —
tankwagon, Newark gal. .19 - —
New York gal. .19 - —
Philadelphia gal. .19½ - —
Cleve's acid, tech., mixed, solid, dms., frt. alld lb. 1.05 - —
Cleve's acid, 1.6, tech., solid, dms., frt. alld lb. .77 - —
1.7, tech., dms., frt. alld. lb. 2.20 - —
Cloves, Madagascar, bgs lb. .39 - —
Zanzibar, bgs. lb. .46 - —
Clove bud oil, USP, dms. lb. 2.75 - —
Clove leaf oil, crude, dms. lb. 1.25 - —
CMC, crude, 96.4% low or medium vis. bgs. or fib. dms., 23,000 lbs., dlvd. E., 100% basis lb. .41½ - —
96.4% low, or medium vis., bgs. or fib. dms., 23,000 lbs. dlvd. E., 100% basis lb. .43½ - —
65%, low or medium vis., bgs., or fib. dms., c.l., dlvd. E., 100% basis lb. .41½ - —
bgs. or fib. dms., l.c.l., dlvd. E., 100% basis lb. .43½ - —
CMC, purif. high vis. (see Cellulose gum).
CMC, standard, low or medium vis., bgs., 23,000 lbs., works, frt. alld lb. .57 - —
bgs., smaller lots, same basis. lb. .59 - —
CMC prices W. of the Rockies are 2c. per lb. lower and are on a works basis.
Coaltar, crude, resale for solns., tanks, works gal. .17 - —
Coaltar, refd., resale, indust., dms., c.l., ex whse gal. .35 - —
dms., l.c.l., ex whse. gal. .39 - —
tanks, works gal. .20½ - —
Coaltar pitch, aluminum, bulk, works ton. 44.00 - —
Carbon and indust, bulk, works. ton. 44.00 - —
Coaltar pitch, core, bulk, works ton. 40.50 - —
Fiber, bulk, works ton. 45.00 - —
Roofing, 140-155°F., Federal Specification RP-381 Type 1, tanks, works ton. 41.00 - —
Cobalt acetate, 23.7% Co., dms. dlvd lb. 1.04 - —
Cobalt blue, genuine, 250 lb. bbls., dlvd. E. of Rockies lb. 4.90 - —
Cobalt blue prices 1c. higher W. of Rockies.
Cobalt blue, imitation (see Ultramarine blue).
Cobalt carbonate, 48% Co., powd., bgs., dlvd lb. 1.45 - —
Cobalt chloride, 24.2% Co., dms., dlvd lb. .99 - —
Cobalt hydrate, 60-61% Co., dms., dlvd lb. 2.05 - —
Cobalt linoleate, fused 8½% Co., dms lb. .71½ - —
Liq., 6% Co., dms. lb. .57½ - —
Cobalt metal, 97-99%, dms. f.o.b. carrier lb. 1.75 - —
Cobalt naphthenate, liq., 6% Co., dms. dlvd lb. .48¾ - —
Cobalt nitrate, 20.1% Co. bbls. dlvd. lb. .80 - —
Cobalt oxide, black, ceramic grade, 72½-73½% Co., dlvd. E. of Rockies lb. 1.33 - —
70-71% Co., kgs. same basis lb. 1.29 - —
Cobalt phosphate, powd., 32.1% Co., dms., dlvd. lb. 1.35 - —
Cobalt resinate, fused 3% Co. dms. lb. .29½ - —
Cobalt sulfate, cryst., 21% Co. dms., dlvd lb. .54 - —
Cobalt sulfate, monohydrated, 33% Co, dms., dlvd lb. 1.09 - —
Cobalt tallate, 6% Co, dms., dlvd. lb. .44 - —
Cocaine, USP, cns., 100-oz. lots oz. 17.50 - —
Cocaine hydrochloride, cns., 100-oz. lots oz. 13.75 - —
Cocillana bark, bls. lb. .20 - .22
Cocoa butter, bgs. lb. .73 - .78
Coconut oil, crude, tanks, New York lb. .21¾ - —
tanks, Pac. coast lb. .20½ - —
Refd., deodorized, dms., l.c.l. lb. .28 - .29
Coconut oil acids, dist., dms. lb. .30½ - .33
tanks lb. .28 - —
double dist. (stripped), dms. lb. .31½ - .34
tanks lb. .29 - —
Cod oil, dms., spot lb. .09 - .09¼
Codeine, NF, cns., 100-oz lots oz. 13.25 - —
Codeine hydrochloride, cns., 100-oz. lots oz. 11.75 - —
Codeine phosphate, USP, cns., 100-oz. lots oz. 10.25 - —
Codeine sulfate, USP, cns., 100-oz. lots oz. 10.75 - —
Codliver oil, USP, dms. gal. 1.40 - 1.70
Cohosh root, black, bls. lb. .20 - .22
Blue, bls. lb. .20 - .22
Colchicine, USP, bots oz. 27.00 - —
Colchicum root, bls. lb. .35 - —
Colchicum seed, bgs. lb. .55 - —
Collodion, USP, dms. lb. .32½ - —
Flexible, dms. lb. .34 - —
Colocynth pulp, bls. lb. .72 - —
Colombo root, bls. lb. .15 - .16
Condurango bark, bls. lb. .26 - —
Congu copal gum, No. 1, bgs lb. .25 - .26
No. 2 bgs. lb. .22 - .24
No. 3, bgs. lb. .16½ - .19

Copaiba balsam, cns., dms. lb. .50 - .95
Copaiba oil, cns. lb. 1.35 - 2.00
Copper acetate, bbls., c.l., works. lb. .53 - —
bbls., l.c.l., works lb. .54 - —
Copper carbonate, 55%, bgs., c.l., works lb. .3485 - —
bgs., l.c.l., works lb. .3635 - —
Copper chloride, cupric, anhyd., dms., works lb. .44¾ - .45¼
Cryst., dihydrate, dms., works, lb. .30½ - .31
Cryst., dried, dms., works lb. .38¾ - .39¼
Copper chloride, cuprous, dms., works lb. .4030 - .4330
Copper cyanide, tech., dms., 20,000-lb lots or more lb. .609 - —
dms., 1,000-lb. lots or more lb. .619 - —
dms., smaller lots lb. .639 - .659
Copper gluconate, dms. lb 3.20 - —
Copper hydrate dms., c.l., frt. alld. E. of Miss lb. .51¾ - —
dms., l.c.l., same basis lo. .52¼ - —
Copper metal, electrolytic, dlvd. Valley basis lb. .31½ - —
Copper naphthenate, liq., 8% Cu, dms., frt. alld lb. .26½ - —
Copper nitrate, tech., cryst., dms., works lb. .30¾ - .32¾
Copper oleate, solid, 9% Cu, dms., works lb. .45 - —
Copper oxide, black, bbls., 100-5,000-lb. lots, works lb. .47¾ - —

Copper oxide, red, 97%, USN Type I, bbls., 100-5,000-lb lots lb. .48½ - —
90%, USN Type II, bbls., 100-5,000-lb. lots or more, works. lb. .46½ - —
Copper quinolinolate, 18% Cu, dms., ton lots lb 4.25 - —
10% active quinolinolate, dms lb 1.14 - 1.15
Copper resinate, precip, dms., frt. alld lb .38½ - —
Copper sulfate, CP, gran., dms., works lb. .1920 - —
Cryst., 98%, bgs. c.l., works, 100 lbs. 12.30 - —
bgs., l.c.l., works 100 lbs. 12.80 - 15.30
Copper sulfate, monohydrated, 35%, dms., c.l., works 100 lbs. 23.05 - —
dms., l.c.l., works 100 lbs. 23.80 - —
Copper sulfate, tribasic, distributors, bgs., c.l., works 100 lbs. 28.15 - —
bgs., l.c.l., works 100 lbs. 29.15 - 32.15
Copper undecylenate, dms. lb 2.75 - —
Copra, Atl., Gulf ports, c.i.f. ton. 275.00 - —
Pac. ports, c.i.f. lb. 270.00 - —
Coriander oil, USP, bots. lb. 9.25 - 11.50
Coriander seed, Moroccan, bgs lb. .08 - —
Rumanian, bgs. lb. .07½ - —
Yugoslavian, bgs. lb. .08½ - —
Corn oil, crude, tanks, works lb. .12⅞ - —
Foots (soapstock) acid 95%, tanks New York lb. .06¾ - —
Refd., salad, dms. lb. .1860 - .1900
tanks lb. .1650 - —
Corn oil acids, dist., dms lb. .16¾ - 19¼
tanks lb. .14¼ - —

BASIC PRODUCERS TC TENNESSEE CORPORATION FROM MINE TO FINISHED PRODUCT

TENNESSEE'S

COPPER SULFATE

Crystal Sizes and Powder

We MINE COPPER and are basic producers of Copper Chemicals—our technical know-how and basic position in Copper is your assurance of exacting quality control, strict uniform consistency and a plentiful supply.

We shall be pleased to send you complete information on TC COPPER SULFATE

TENNESSEE TC CORPORATION
TENNESSEE CORPORATION

617-629 Grant Building, Atlanta, Ga.

Corn Sugar—Denatured Alcohol

Corn sugar, tanners, chipped, paper bgs., c.l., 60,000 lbs. min	100 lbs	7.30	—
paper bgs., l.c.l.	100 lbs	7.45	—
Corn syrup, 42° Be., non-ret. dms., c.l.	100 lbs	7.31	—
non-ret. dms., l.c.l.	100 lbs	7.46	—
Corrosive sublimate (see Mercuric chloride).			
Cortisone acetate, USP kilo or more	gram	1.90	2.00
Costus oil, bots.	oz	6.00	—
Cottonseed meal, 41%, bgs., Memphis	ton	62.00	—
Cottonseed oil, crude, tanks, South, East	lb.	.12¼-	—
tanks, Valley	lb.	.12¼-	—
tanks, Texas, Lubbock	lb.	.11¾	Nom.
tanks, Texas, Waco	lb.	.11¾	Nom.
Foots (soapstock), acid 95%, tanks, New York	lb.	.04	Nom.
Refd., salad, dms.	lb.	.17⅜-	.1760
tanks	lb.	.15⅜-	—
Cottonseed oil acids, dist., dms	lb	.16¾-	.19¼
tanks	lb	.14¼-	—
Coumarin, NF, cryst., dms.	lb	3.60	3.70
Cramp bark, NF, bls.	lb.	.85	.90
Cream of tartar (see Potassium bitartrate).			
Creosote carbonate, NF, bots, cbys.,	lb.	3.05	3.26
Creosote, coaltar, crude, tanks, works, frt. adjusted	gal.	.24	—
crude, soln. 80%, tanks, works,	gal.	.226	—
Creosote, coaltar, refd., dms., c.l., works	gal.	.50	—
dms., l.c.l., same basis	gal.	.62	—
tanks, same basis	gal.	.38	—
West Coast creosote prices computed on a basis of 24c. per gallon for straight oil and 20c. per gallon for coaltar.			
Creosote oil (see Creosote coaltar).			
Creosote, beechwood, cbys., dms., f.o.b., works, dlvd. in Metropolitan area	lb.	1.72	1.77
Hardwood, NF, cbys., dms., same basis	lb.	1.42	1.47
Pinewood, dms., incl., c.l., works	lb.	.0561-	—
dms incl., l.c.l., works	lb.	.0634-	—
dms incl., l.c.l., ex whse, New York	lb.	.0745-	—
tanks, works	lb.	.0460-	—
Cresol, tech., 50% below 204°C., dry above 207°C., wide distillation range, non-ret. dms., c.l., frt. alld	lb.	.16½-	—
non-ret. dms., l.c.l., same basis	lb.	.17½-	—
tanks, same basis	lb.	.145	—
USP, non-ret. dms., c.l., same basis	lb.	.18	—
non-ret. dms., l.c.l., same basis	lb.	.19	—
tanks, same basis	lb.	.16	—
m-Cresol, 95-98% dms., c.l., works.	lb.	.60	—
dms., l.c.l., works	lb.	.61	—
m-p-Cresol, 5-95% 3°C., dms., c.l., frt. equald	lb.	.18	—
dms., l.c.l., same basis	lb.	.19	—
tanks, same basis	lb.	.16	—
2.97% 2°C., dms., c.l., frt. equald.	lb.	.22	—
dms., l.c.l., same basis	lb.	.23	—
tanks, same basis	lb.	.20	—
o-Cresol, 30.5°C. m.p. and over, ret. dms., c.l., frt. equald	lb.	.17	—
ret. dms., l.c.l., same basis	lb.	.18	—
tanks, same basis	lb.	.15	—
30°-30.49°C. m.p., dms., c.l., frt. equald	lb.	.16½-	—
ret. dms., l.c.l., same basis	lb.	.17½-	—
tanks, same basis	lb.	.14½-	—
29°-29.9°C. m.p., dms., c.l., frt. equald	lb.	.16	—
ret. dms., l.c.l., same basis	lb.	.17	—
tanks, same basis	lb.	.14	—
25°-28.9°C. m.p., dms., c.l., frt. equald.	lb.	.15	—
ret. dms., l.c.l., same basis	lb.	.16	—
tanks, same basis	lb.	.13	—
p-Cresol, 98%, dms., c.l., dlvd.	lb.	.52	—
dms., l.c.l., dlvd.	lb.	.53	—
tanks, dlvd.	lb.	.49	—
2,3-Cresotic acid, dms., ton lots, works	lb.	.70	—
dms., smaller lots, works	lb.	.72	—
p-Cresyl methyl ether, cns.	lb.	1.80	2.05
Cresylic acid, coaltar, dom., meta-para content above 25%, resins and tricresyl phosphate grades, dms., c.l., t.l., frt. equald	gal.	1.35	—
dms., l.c.l., same basis	gal.	1.40	—
tanks, same basis	gal.	1.15	—
Cresylic acid, coaltar, dom., meta-para content 25% or less, dms., c.l., t.l., same basis	gal.	1.20	—
dms., l.c.l., same basis	gal.	1.25	—
tanks, frt. equald.	gal.	1.00	—
Cresylic acid, coaltar, imp., meta-para content, 25% or less, f.o.b. works, frt. equald, to competitive points, 50 dms. or more	gal.	1.63½-	—
less than 50 dms., same basis.	gal.	1.05	1.15
tanks, same basis	gal.	1.00	—
Crotonaldehyde, 91-93%, dms., l.c.l., works	lb.	.25	—
Crotonic acid, dms., 200 lbs. or more, l.c.l., works	lb.	.51	—
Cryolite, nat., indust., bgs., c.l., works 100 lbs.		13.00	—
bgs., l.c.l., works 100 lbs.		14.25	—
Cube root, powd., 5% rotenone, bgs., c.l., t.l., works	lb.	.25	—
Cubeb berries, NF, bgs.	lb.	1.00	—
Powd., cs.	lb.	1.15	—
Cubeb oil, cns.	lb.	12.00	16.00
Cumene, dms., c.l., works	lb.	.12	—
dms., l.c.l., works	lb.	.14	—
tanks, works	lb.	.11	—
Cumin seed, Iranian, bgs.	lb.	.31	—
Moroccan, bgs.	lb.	.31	—
Turkish, bgs.	lb.	.28	—
Cumin seed oil, bots., cns.	lb.	15.50	17.00
Cyanamide, fertilizer, mixing grade, 21% N, gran., bgs., Niagara Falls, Ont., contract	ton.	57.00	—
pulv., 21% N, bgs., works, unit-	ton.	2.85	—
Cyanamide, indust. grade, bgs., c.l., works	ton.	75.00	—
bgs., l.c.l., works	ton.	96.00	—
indust. grade, 6-16 mesh, dms., c.l., works	ton.	120.00	—
dms., l.c.l., works	ton.	140.00	—
Cyclohexane, 99%, tech., dms., c.l., dlvd. E. of Rockies	gal.	1.02	—
dms., l.c.l., same basis	gal.	1.10	—
Cyclohexane, 99%, tech., dms., c.l., dlvd. W. of Rockies	gal.	.77	—
dms., l.c.l., same basis	gal.	.85	—
tanks, works	gal.	.55	—
Cyclohexanol, tech., dms., c.l., works, frt. alld. E.	lb.	.28½-	—
dms., l.c.l., works, same basis.	lb.	.29½-	—
tanks, works, same basis	lb.	.26	—
Cyclohexanone, tech., dms., c.l., works	lb.	.33½-	—
dms., l.c.l., works	lb.	.34½-	—
tanks, works	lb.	.31	—
Cyclohexylamine, dms., c.l., works.	lb.	.49	—
dms., l.c.l., works	lb.	.50	—
tanks, works	lb.	.47	—
Cyclopropane, CP, 2-lb. cyls., works.	cyl.	48.00	—
6-oz cyls., works	cyl.	12.00	—
Cyclopropane, USP, hospitals, cyls., 40-gal. lots	gal.	.42	—
cyls., 100-gal lots	gal.	.41	—
cyls., 200-gal. lots	gal.	.40	—
Cypress oil, bots.	lb.	5.30	—

D

2,4-D, tech., bgs., dms., c.l., works, frt. equald	lb.	.40	—
bgs., dms., l.c.l., same basis	lb.	.45	.49
2,4-D butyl ester, dms., c.l., works.	lb.	.43	—
dms., l.c.l., same basis	lb.	.48	.52
tanks, same basis	lb.	.42	—
2,4-D isopropyl ester, dms., c.l., works	lb.	.43	—
dms., l.c.l., works	lb.	.48	.52
tanks, works	lb.	.42	—
Dammar gum, Batavia, A/E, cs	lb.	No stocks.	
East India, Batu, bold, bgs.	lb.	.14¼-	.16⅛
nubs and chips, bgs.	lb.	.08½-	.09⅛
black, bold, bgs	lb.	.14½-	.16⅛
nubs and chips, bgs.	lb.	.12¼-	.13⅛
unscraped, bgs.	lb.	.13	.14⅛
pale, chips, bgs	lb.	.14½-	.16
nubs and chips, bgs.	lb.	.09	.10
Siam, cs.	lb.	.30	.33
Singapore, No. 1, bgs.	lb.	.36	.41
No. 2, bgs.	lb.	.29	.32
No. 3, bgs.	lb.	No stocks.	
dust, bgs.	lb.	.17	.19
Dandelion root, bls.	lb.	.28	.32
DDD, tech., flake, grd., fib. dms., c.l., works	lb.	.45	.47
fib. dms., l.c.l., works	lb.	.46	.48
DDT, flake or lump, bgs., c.l., dlvd.	lb.	.23	—
bgs., smaller lots same basis.	lb.	.25	—
fib. dms., c.l., same basis	lb.	.24	—
fib. dms., smaller lots, same basis	lb.	.26	—
Powdered DDT 1c. per pound higher.			
1-Decanol, tech., dms., c.l., dlvd. E.	lb.	.41½-	—
dms., l.c.l., dlvd. E.	lb.	.43½-	—
tanks, dlvd. E.	lb.	.39	—
Decyl alcohol, mixed isomers, dms., c.l., dlvd	lb.	.23½-	—
dms., l.c.l., dlvd	lb.	.25	—
tanks, dlvd.	lb.	.21	—
Perfume grade, bots	lb.	1.75	2.00
Decyl alcohol, normal (see 1-Decanol).			
Deertongue leaves, bls	lb.	.45	—
Defluorinated phosphate, feed grade, 13% P, paper bgs., c.l., t.l., works	ton.	51.00	—
18% P, paper bgs., c.l., works.	ton.	63.50	69.12
19% P, paper bgs. works, Houston, Tex., c.l., t.l	ton.	71.50	—
Prices of defluorinated phosphate in bulk $3 per ton less than bg. c.l. prices			
Degras, common, bbls	lb.	.10	.12
Neutral, bbls.	lb.	.21	.23
Denatured alcohol, ethyl, CD-12, CD-13, CD-14, CD-17, dms., c.l., dlvd. E. of Rockies	gal.	.69½-	—
dms., l.c.l., same basis	gal.	.74½-	.80⅛
tanks, dlvd., same basis	gal.	.53½-	—
Tankcar sales require written authorization by Alcohol and Tobacco Tax Division			
Denatured alcohol ethyl, proprietary solvent, dms., c.l., dlvd. E. of Rockies	gal.	.72	—
dms., l.c.l., same basis	gal.	.77	.83
tanks, same basis	gal.	.56	—
Tankcar sales require written authorization by Alcohol and Tobacco Tax Division.			
Denatured alcohol, ethyl, SD1, dms., dlvd. E. of Rockies	gal.	.70½-	—
dms., l.c.l., same basis	gal.	.75½-	.81⅛
tanks, same basis	gal.	.54½-	—
SD2B, dms., c.l., dlvd. E. of Rockies	gal.	.69	—
dms., l.c.l., same basis	gal.	.74	.80
tanks, same basis	gal.	.53	—
SD3A, dms., c.l., dlvd. E. of Rockies	gal.	.68	—
dms., l.c.l., same basis	gal.	.73	.79
tanks, same basis	gal.	.52	—
SD23A, dms., l.c.l., dlvd. E. of Rockies	gal.	.70½-	—
dms., l.c.l., same basis	gal.	.75½-	.81⅛
tanks, same basis	gal.	.54½-	—

MONTROSE
CHEMICAL COMPANY

100 LISTER AVENUE
NEWARK, NEW JERSEY

Dimethyl Isophthalate

Trimethyl Borate — Trimethoxy Boroxine

T.C.P. — Tricresyl Phosphate

Mono Cresyl Diphenyl Phosphate

D.D.T. — Dichloro Diphenyl Trichloroethane

Ethyl Silicate 28% — 40%

D.D.V.P. — Dimethyl Dichloro Vinyl Phosphate
(Minimum 95% Purity)

D.E.T. — Diethyl Toluamide
(95% Meta Isomer)

EXCLUSIVE SALES AGENTS

R. W. GREEFF & CO., INC.
10 ROCKEFELLER PLAZA, NEW YORK 20, N. Y.
1721 TRIBUNE TOWER, CHICAGO, ILLINOIS

Denatured alcohol, ethyl, SD23H, dms., c.l., dlvd. E. of Rockies	gal.	.71	—
dms., t.c.l., same basis	gal.	.76	.82
tanks, same basis	gal.	.55	—
SD29, dms., c.l., dlvd. E. of Rockies	gal.	.69½	—
dms., t.c.l., same basis	gal.	.74½	.80½
tanks, same basis	gal.	.53½	—
SD30, dms., c.l., dlvd. E. of Rockies	gal.	.68	—
dms., t.c.l., same basis	gal.	.73	.79
tanks, same basis	gal.	.52	—
SD-35A, dms., c.l., dlvd. E. of Rockies	gal.	.71	—
dms., t.c.l., same basis	gal.	.76	.82
tanks, same basis	gal.	.55	—
SD-40 dms., c.l. dlvd. E. of Rockies	gal.	.70½	—
dms., t.c.l., same basis	gal.	.75½	.81½
tanks, same basis	gal.	.54½	—

For anhyd. alcohol on above formulas, prices are 7c. per gal. higher.

West coast dlvd. prices are the same as eastern prices, except in Idaho, Montana, Oregon, and Washington where a 5c. differential on tankcars is maintained.

d-Desoxyephedrine hydrochloride, dms	lb.	15.00	-17.00
dl-Desoxyephedrine hydrochloride, dms	lb.	6.50	—
Dextrin, corn, gum, paper bgs., c.l., 100 lbs.		9.38	—
paper bgs., l.c.l.	100 lbs.	9.53	—
Dextrin, corn, canary dark, paper bgs. c.l	100 lbs.	9.22	—
paper bgs., l.c.l.	100 lbs.	9.37	—
Dextrin, corn, indust. grade, 6-16 mesh, dms., canary light, paper bgs., c.l	100 lbs.	9.12	—
paper bgs., l.c.l	100 lbs.	9.27	—
white, paper bgs., c.l.	100 lbs.	8.96	—
paper bgs., l.c.l	100 lbs.	9.11	—

Corn dextrin in cotton bgs. 15c. per 100 lbs. higher.

Dextrose, anhyd., coml., bgs., c.l., ex whse.	100 lbs.	8.50	—
bgs., l.c.l., ex whse	100 lbs.	8.65	—
Hydrated, coml., bgs., c.l., ex whse.	100 lbs.	7.30	—
bgs., l.c.l., ex whse	100 lbs.	7.45	—
Anhyd., special, al. foil lined fib. dms., 200-lb. dms	100 lbs.	14.70	—
100-lb. dms	100 lbs.	15.20	—
USP, dms.	lb.	.19¾	—
Diacetyl, flavor grade, bots	lb.	4.30	4.55
Di-sec-amyl phenol, dms., c.l., works	lb.	.32	—
dms., t.c.l., works	lb.	.33	—
tanks, works	lb.	.29½	—
Di-tert-amyl phenol, dms., c.l., works	lb.	.32	—
dms., t.c.l., works	lb.	.33	—
tanks, works	lb.	.29½	—
Diacetone alcohol, acetone-free, dms., c.l., dlvd	lb.	.15½	—
dms., t.c.l., dlvd	lb.	.17	—
tanks, dlvd	lb.	.13	—
Diacetone alcohol, tech., dms., c.l., dlvd	lb.	.15	—
dms., t.c.l., dlvd	lb.	.16½	—
tanks, dlvd.	lb.	.12½	—
Diallylamine, dms., c.l., dlvd	lb.	.98½	—
dms., t.c.l., dlvd	lb.	1.00	—
tanks, dlvd.	lb.	.96	—
o-Dianisidine, dry, tech., fib. dms.	lb.	2.00	—
Dibenzyl sebacate, dms., c.l., works.	lb.	.93	—
dms., t.c.l., same basis	lb.	.94	—
tanks, same basis	lb.	.91	—
p-Dibromobenzene, bgs., 500-lb. lots.	lb.	.53	—
2,6-Di-tert-butyl-p-cresol, food grade, dms., l.t.l., dlvd	lb.	1.10	—
2,6-Di-tert-butyl-p-cresol, feed grade, to pre-mix distributors, dms., c.l., t.l., dlvd	lb.	.87½	—
dms., t.c.l., same basis	lb.	.91	—
2,6-Di-tert-butyl-p-cresol, tech., dms., c.l., t.l., dlvd	lb.	.81	—
dms., t.c.l., same basis	lb.	.85	—
tanks, same basis	lb.	.79	—
Dibutyl fumarate, dms., c.l., t.l., frt. alld.	lb.	.33	—
dms., t.c.l., t.t.l., frt. alld	lb.	.34	—
tanks, frt. alld	lb.	.30½	—
Dibutyl maleate, dms., c.l., t.l., frt. alld.	lb.	.33	—
dms., t.c.l., t.t.l., dms, frt. alld	lb.	.34	—
tanks, frt. alld	lb.	.30½	—
Dibutyl phthalate, dms., c.l., dvd. E.	lb.	.28½	—
dms., t.c.l., same basis	lb.	.30	—
tanktrucks, 1,000-1,999 gals., same basis	lb.	.26½	—
tankcars, tanktrucks, 2,000 gals., same basis	lb.	.26	—
Dibutyl sebacate, dms., c.l., works.	lb.	.67½	—
dms., t.c.l., works	lb.	.68½	—
tanks, works	lb.	.65½	—
Dibutyl tartrate, dms., works, frt. alld	lb.	.65½	—
Dibutylamine, dms., c.l., dlvd	lb.	.55½	—
dms., t.c.l., same basis	lb.	.57	—
tanks, same basis	lb.	.53	—
Dicapryl phthalate, dms., c.l., dlvd.	lb.	.28	—
dms., t.c.l., dlvd	lb.	.29½	—
tanks, dlvd.	lb.	.24½	—
Dicapryl sebacate, dms., c.l., works.	lb.	.63	—
dms., t.c.l., works	lb.	.63½	.64
tanks, works	lb.	.61	—
Dichlorophenoxyacetic acid (see 2,4-D).			
2,5-Dichloroaniline, dms., works	lb.	.83	—
3,4-Dichloroaniline, tech., solid, tanks, frt. alld	lb.	.73	—
o-Dichlorobenzene, dms., c.l., frt. alld. E	lb.	.12¾	—
dms., t.c.l. same basis	lb.	.13¾	—
tanks, same basis	lb.	.11	—
p-Dichlorobenzene, dms., c.l., f.o.b., works, frt. alld. E	lb.	.12	—
dms., 2,000 lbs. or more same basis.	lb.	.14½	—
1,4,-Dichlorobutane, dms., c.l. or t.l., works	lb.	.33½	—
dms., t.c.l., or t.t.l., works	lb.	.34	—
tanks, works	lb.	.32	—
Dichlorodiphenyltrichloroethane (see DDT).			
2,2-Dichloroethyl ether, dms., c.l., t.l., dlvd. E	lb.	.15½	—
dms., t.c.l., t.t.l., same basis	lb.	.17	—
tanks, same basis	lb.	.13	—
Dichloropentanes, dist., dms., c.l., works	lb.	.03	—
dms., t.c.l., works	lb.	.06	—
tanks, works	lb.	.03	—
Dicyclohexylamine dms., c.l., works.	lb.	.54	—
dms., t.c.l. works	lb.	.55	—
tanks, works	lb.	.52	—
Dicyclohexyl phthalate, gran., fib. dms., c.l., works, frt. alld.	lb.	.46½	—
fib. dms., t.c.l., same basis	lb.	.48	—
Didecyl phthalate, dms., c.l., works.	lb.	.28½	—
dms., t.c.l., same basis	lb.	.30	—
Didecyl phthalate, tanktrucks, 1,000-1,999 gals., same basis	lb.	.26½	—
tankcars, tanktrucks, 2,000 gals.,	lb.	.26	—
Dieldrin, dms., dlvd	lb.	1.85	—
dms., t.c.l., dlvd	lb.	1.90	—
Diethanolamine, dms., c.l., dlvd. E.	lb.	.27	—
dms., t.c.l., same basis	lb.	.28	—
tanks, same basis	lb.	.24½	—
Diethanolamine lauryl sulfate, dms., c.l., frt. alld	lb.	.27½	—
dms., t.t.l., frt. alld	lb.	.28½	—
tanks, frt. alld	lb.	.26½	—
Diethyl barbituric acid (see Barbital).			
Diethylbenzene, dms., t.l., frt. alld.	lb.	.16½	—
dms., t.t.l., same basis	lb.	.18½	—
Diethyl carbonate, dms., c.l., f.o.b. works	lb.	.47½	—
dms., t.c.l., same basis	lb.	.48½	—
tanks, same basis	lb.	.45	—
Diethyl ethanolamines, dms., c.l., dlvd	lb.	.69½	—
dms., t.c.l., dlvd.	lb.	.71	—
tanks, dlvd.	lb.	.67	—
Diethyl oxalate, dms., c.l., f.o.b. works	lb.	.42½	—
dms., t.c.l., same basis	lb.	.43½	—
tanks, same basis	lb.	.40	—
Diethyl phthalate, dms., c.l., dlvd.	lb.	.27½	—
dms., t.c.l., dlvd	lb.	.29	—
Diethyl phthalate, tanktrucks, 1,000-1,999 gals., same basis	lb.	.26½	—
tankcars, tanktrucks, 2,000-lb. lots, same basis	lb.	.26	—
Diethyl sulfate, dms., c.l., works	lb.	.19½	—
dms., t.c.l., works	lb.	.20¼	—
tanks, works	lb.	.17½	—
Diethyl toluamide, 90-95% meta isomer, dms., c.l., t.l., works	lb.	2.30	—
5-44 dm. lots, works	lb.	2.35	—
1-4 dm. lots, works	lb.	2.40	—
Diethylamine, dms., c.l., dlvd. E	lb.	.52	—
dms., t.c.l., same basis	lb.	.53½	—
tanks, same basis	lb.	.49½	—
N,N-Diethylaniline, dms., c.l., frt. alld	lb.	.57	—
dms., t.c.l., same basis	lb.	.58	—
tanks, same basis	lb.	.55	—
N,N-Diethyl-m-toluidine, tech., liq., tanks, frt. alld	lb.	.83	—
Di-2-ethylhexyl adipate (see Dioctyl adipate).			
Di-2-ethylhexyl phthalate (see Dioctyl phthalate).			
Diethylene glycol, dms., c.l. dlvd. E	lb.	.17¾	—
dms., t.c.l., same basis	lb.	.18¾	—
tanks, same basis	lb.	.15¼	—
Diethylene glycol diethyl ether, dms., c.l., works	lb.	.51½	—
dms., t.c.l., works	lb.	.52¼	—
Diethylene glycol monobutyl ether, c.l., dms., works	lb.	.30¾	—
dms., t.c.l., works	lb.	.31¾	—
tanks, dlvd. E	lb.	.28¼	—
Diethylene glycol monobutyl ether acetate, dms., c.l., works	lb.	.30¾	—
dms., t.c.l., works	lb.	.31½	—
tanks, dlvd. E	lb.	.28¾	—
Diethylene glycol monoethyl ether, dms., c.l., dlvd	lb.	.22½	—
dms., t.c.l., dlvd	lb.	.23½	—
tanks, dlvd. E	lb.	.20	—
Diethylene glycol monoethyl ether acetate dms., c.l., works	lb.	.27¼	—
dms., t.c.l., works	lb.	.28	—
tanks, works	lb.	.25¼	—
Diethylene glycol monomethyl ether, dms., c.l. dlvd	lb	.21	—
dms., t.c.l., dlvd	lb.	.22	—
tanks, dlvd. E	lb.	.18½	—
Diethylenetriamine, dms., c.l., dlvd. E	lb.	.44	—
dms., t.c.l., dlvd. E	lb.	.45½	—
tanks, dlvd. E	lb.	.41½	—
Diethylstilbestrol, USP, bots, 10-kilo lots	kilo.	100.00	147.50
bots., 1-kilo lot	kilo.	110.00	152.50
Digitalis leaves, USP, dom., dms	lb	1.20	—
Digitoxin, USP, bots	gram.	4.75	—
Diglycol laurate, dms	lb.	.32¾	.34
Diglycol stearate, dms., ton lots	lb.	.26	.28
Diglycolic acid, bgs., c.l., t.l., works.	lb.	.15½	—
bgs., l.c.l., works	lb.	.16	—
Dihexyl sebacate, dms., c.l., works.	lb.	.66	—
dms., t.c.l., works	lb.	.67	—
tanks, works	lb.	.64	—
Dihydrazine sulfate, dms., works	lb.	1.10	1.25
Dihydrostreptomycin hydrochloride, bulk	gram.	.037	.038
Dihydrostreptomycin sulfate, bulk, gram	lb.	.037	.038
1,2-Dihydroxy anthraquinone, dms., works	lb.	3.45	—

NEW *never before available*

SUMSTAR™

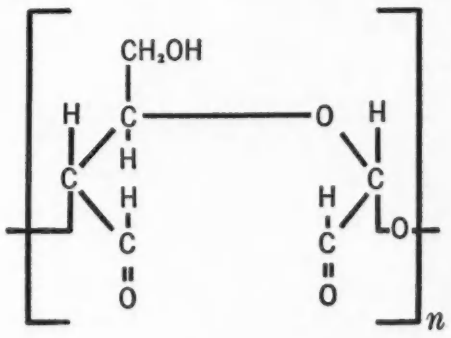
a polymeric dialdehyde

For the first time, a new polymeric dialdehyde, Dialdehyde Starch, is offered under the name SUMSTAR™ by Sumner Chemical Company.

Originally developed by the United States Department of Agriculture's Northern Utilization Research & Development Division, the process has been adapted for manufacture by Sumner.

Dialdehyde Starch is described as "cornstarch oxidized by periodate ion. Oxidation breaks the carbon-to-carbon bond between C_2 and C_3 of the starch molecule's glucose units, forming a dialdehyde unit. Any number of glucose units can be oxidized, depending on the properties wanted at the time." (Chem. & Eng. News, Dec. 9, 1957)

Following is the structural formula and the list of tentative specifications for SUMSTAR now being made in limited quantities. (The specifications will vary, of course, for specific grades and types of SUMSTAR.)



description: Free-flowing white to pale yellow powder

percent aldehyde content: As required (corrected for water)

currently available: 1. Over 90%
2. 75%-80%
3. 50%

water: Less than 10%

heavy metals: 20 ppm. maximum

sulfated ash: 1% maximum

The applications of this polymeric dialdehyde for industry appear to be almost unlimited. Many uses have already been evaluated and many others are in the process of evaluation. Here are some of the principal industrial applications which are being evaluated:

leather—tanning
textiles—crease resistance and waterproofing
plastics—new polymers
paper—increase in wet strength

The many areas in which applications research on SUMSTAR is under way cover as broad a range as the chemical industry itself. Here is, for example, a polymer with the functional groups of glyoxal. Evaluation of SUMSTAR as a photographic hardener, bacterial inhibitor in cutting oils, vulcanization retardant, coating for printing plates, etc., are a few suggested areas for product development and process modification with SUMSTAR.

SUMSTAR™ is now available in limited quantities. Samples are available upon request.

SUMNER CHEMICAL COMPANY
Division of Miles Laboratories, Inc.

Zeeland, Michigan • General Sales Offices: 6 E. 45th Street, New York 17, N. Y. • MUrray Hill 2-7970
West Coast: B. W. Holmes, La Canada, California • Address inquiries to New York Office.

2,2-Dihydroxy-5-5-dichloro-diphenylmethane—Dyes, Coaltar

2,2-Dihydroxy-5-5-dichloro-diphenylmethane, pure, dms lb. 2.55 - —
tech., dms. lb. 1.09 - —
Di-isobutyl ketone, dms. c.l., dlvd. lb. .17 - —
dms., l.c.l., dlvd lb. .18½- —
tanks, dlvd. lb. .14½- —
Di-isobutyl phthalate, dms., c.l., dlvd E lb. .31½- —
dms., l.c.l., same basis lb. .32½- —
tanks same basis lb. .29 - —
Di-isobutylene, dms. c.l. dlvd. E lb. .10 - —
dms., l.c.l., dlvd. E lb. .11½- —
tanks, dlvd E lb. .08 - —
Di-iso-octyl phthalate, dms., c.l., dlvd lb. .27½- —
dms., l.c.l., same basis lb. .29 - —
tanktrucks, 1.000-1.999 gals lb. .25½- —
tankcars, tanktrucks, 2.000 gals., lb. .25 —
Di-iso-octyl sebacate, dms., c.l., works lb. .62 —
dms., l.c.l., works lb. .62½- .63
tanks, works lb. .60 —
Di-isopropanolamine, dms. c.l., dlvd. lb. .23¼- —
dms., l.c.l., same basis lb. .24¾- —
tanks, same basis lb. .20¾- —
Di-isopropylamine dms., c.l., dlvd. E of Rockies lb. .50½- —
dms., l.c.l., same basis lb. .52 - —
tanks, same basis lb. .48 - —
Dillweed oil dom bots. dms lb 3.10 4.10
Dimethyl anthranilate, cns. lb. 4.35 - —

Dimethyl ethanolamines, anhyd., dms. c.l., dlvd lb 1.225 - —
dms., l.c.l., dlvd. lb. 1.235 - —
tanks, dlvd. lb. 1.20 - —
70% dms. c.l., dlvd., 100% basis, contained amines lb. 68½- —
dms., l.c.l., dlvd., 100% basis lb. .69½- —
tanks, dlvd., 100% basis lb. .66 —
Dimethyl hydroquinone, dms. lb. 1.90 2.20
Dimethyl phthalate, dms., c.l., works lb. .27½- —
dms., l.c.l., works lb. .29 - —
tanktrucks, 1.000-1.999 gals., same basis lb. .25½- —
tankcars, tanktrucks, 2.000 gals., same basis lb. .25 —
Dimethyl sebacate, dms. c.l. works. lb. 1.31 - —
dms., l.c.l., works lb. 1.30 - —
tanks, works lb. 1.28 - —
Dimethyl sulfate, ret. dms., c.l., works lb. .17½- —
ret. dms., l.c.l., works lb. .18½- —
tanks, works lb. .16½- —
Dimethyl sulfide, dms. c.l., works. lb. .16½- —
dms., l.c.l. works lb. .17 - —
tanks, works lb. .15 - —
Dimethylamine, 25% soln., dms., c.l., frt. equald, 100% basis lb. .38 - —
dms., l.c.l., frt. equald, 100% basis lb. .38½- —
tanks, frt. equald, 100% basis lb. .28 - —

Dimethylamine, 40% soln., dms., c.l., frt. equald, 100% basis lb. .35 - —
dms., l.c.l., frt. equald, 100% basis lb. .35½- —
tanks, frt. equald 100% basis, lb. .28 - —
N,N-Dimethylaniline, dms. c.l., frt., alld lb. .30 - —
dms., l.c.l. frt. alld. lb. .31 - —
tanks, frt. alld. lb. .28 - —
N,N-Dimethylformamide dms., works. lb. .34 - .39
tanks, works lb. .32 - —
2,4-Dinitroaniline, dms., frt alld lb. .75 - —
Dinitroaniline orange toner, CP, bbls., dlvd E of Rockies lb. 1.56 - —
Dinitroaniline orange toner prices 1c higher W of Rockies.
m-Dinitrobenzene, 85°C., dms. lb. .22 - —
89° C., dms. lb. .24 - —
2,4-Dinitrochlorobenzene, crystallizing at 46½°C. dms., c.l., frt. alld. E lb. .15¼- —
dms., l.c.l. frt. alld E. lb. .15¾- —
tanks, frt. alld. E lb. .15 - —
2,4-Dinitrochlorobenzene, crystallizing at 48°C., dms., c.l., frt. alld E lb. .20¼- —
dms., l.c.l. frt. alld. E. lb. .20¾- —
tanks, frt. alld E lb. .20 - —
2,4-Dinitrophenol, bbls. lb. .37 - —
2,4-Dinitrotoluene, oily dms. lb. .11 - —
Refd., 63°C., dms. lb. .23 - —
Dioctyl adipate dms. c.l., works. lb. .42½- —
dms. l.c.l. works lb. .43½- —
tanks, works lb. .40 - —
Dioctyl phthalate, dms., c.l., frt. alld lb. .27½- —
dms., l.c.l., frt. alld lb. .29 - —

Dioctyl phthalate, tanktrucks, 1,000-1,999 gals., same basis lb. .25¼- —
tankcars, tanktrucks, 2,000 gals., same basis lb. .25 —
Dioctyl sebacate, dms., c.l., works. lb. .61¼- —
dms., l.c.l., works lb. .62¼- —
tanks, works dlvd. lb. .59¼- —
1,4-Dioxane, dms. c.l. works lb. .30 - —
dms., l.c.l. works lb. .30¾- —
tanks, works lb. .28 - —
Dipentaerythritol, c.l., t.l., dlvd. E. lb. .40 - —
bgs., l.c.l., t.t.l., dlvd. E lb. .41 - —
Dipentene, dest.-dist., dms., c.l., works gal. .59 - —
dms., l.c.l., works gal. .63 - —
dms., l.c.l., ex whse. gal. .79 - —
tankcars, works gal. .42 - —
Dipentene, steam dist., dms., c.l., works, South gal. .72 - —
dms., l.c.l., dlvd. New York gal. .91 - —
tanks, works, South gal. .55 - —
Dip oil (see Tar acid oil)
Diphenyl, bgs., c.l., t.l., works lb. .17¼- —
bgs., l.c.l., works lb. .19 - —
tanks, works lb. .16 - —
Diphenyl oxide, perfume grade, cns. lb. .65 - .85
Diphenyl phthalate, dms., c.l., works. lb. .51¾- —
dms., l.c.l. works lb. .53¾- —
Diphenylamine, refd., flake, bgs., c.l., works, frt. equald lb. .31 - —
bgs., l.c.l., same basis lb. .33 - —
Diphenylamine, refd., fused, tanks, same basis lb. .28 - —
Refd. diphenylamine in dms ½c. per lb. higher.
Diphenylguanidine, bgs., dms., ton lots, frt. alld lb. .48 - —
bgs., smaller lots, frt. alld. lb. .50 - —
Diphenylhydantoin-sodium USP dms. lb. 5.00 - 5.60
Dipropylene glycol, dms., c.l., frt. alld lb. .17¾- —
dms., l.c.l., frt. alld. lb. .18¾- —
tanks, frt. alld. lb. .15¼- —
Dipropylene glycol methyl ether, dms., c.l., dlvd. E lb. .20 - —
dms., l.c.l., same basis lb. .21 - —
tanks, same basis lb. .18½- —
Dithiodibenzoic acid, dms., 1,000-lb. lots, works lb. 1.45 - —
Di-o-tolylguanidine, dms., ton lots, frt. alld lb. .69 - —
dms., smaller lots, frt alld. lb. .70 - —
Di-o-tolylthiourea, tech., solid, dms., c.l., t.l., frt. alld lb. .55 - —
Divinylbenzene, 20-25%, dms., c.l., works, frt. equald lb. .20 - —
dms., l.c.l., same basis lb. .21 - —
tanks, same basis lb. .19 - —
50-60%, dms., c.l., works, 100% basis lb. 1.00 - —
dms., l.c.l., works, 100% basis lb. 1.05 - —
Dodecylbenzene, dms., c.l., f.o.b. works, frt. equald lb. .134 - —
dms., l.c.l., same basis lb. .144 - —
tanks, same basis lb. .114 - —
Dodecylphenol, c.l., frt. alld. lb. .22 - —
dms., l.c.l., same basis lb. .23 - —
tanks, same basis lb. .19½- —
Dodecylphenol prices on shipments to Western States are 2c. per pound higher.

Dyes, coaltar, certified colors for food, drugs and cosmetics, 500-lb. and 1-lb. lots, dlvd:
Blue, FD&C, No. 1 lb.15.65 -17.60
No. 2 lb.15.65 -17.60
Green, FD&C, No 1 lb.15.65 -17.60
No. 2 lb.19.60 -22.85
No. 3 lb.31.30 -35.90
Red, FD&C, No. 1, cns. lb. 5.90 - 7.85
No. 2 lb. 3.30 - 4.10
No. 3 lb.19.60 -22.85
No. 4 lb. 5.55 - 7.50
Violet, FD&C, No. 1, cns. lb.15.65 -17.60
Yellow, FD&C, No. 1, cns. lb. 9.15 -11.05
No. 5 lb. 3.30 - 4.10
No. 6 lb. 3.30 - 4.10

Dyes, coaltar, certified colors for drugs and cosmetics, 200 lb. and 1 lb. lots, dlvd:—
Black, D&C, No. 1 lb.10.50 -10.95
Brown, D&C, No. 1 lb.15.65 -16.10
Green, D&C, No. 5 lb.15.65 -16.10
No. 6 lb.15.65 -16.10
No. 7 lb.14.35 -14.80
Orange, D&C, No. 3 lb.10.50 -10.95
No. 4 lb.19.60 -20.05
No. 5 lb. 3.80 - 4.25
Red, D&C, No. 17 lb.10.50 -10.95
No. 18 lb.23.60 -24.00
No. 19 lb.15.00 -15.45
No. 21 lb 3.90 - 4.35
No. 22 lb.10.50 -10.95
No. 28 lb.24.15 -24.65
No. 33 lb.17.00 -17.45
Violet, D&C, No. 2 lb.15.65 -16.10
Yellow, D&C, No. 7 lb.10.50 -10.95
No. 8 lb.10.50 -10.95
No. 10 lb.13.05 -13.50
No. 11 lb.13.05 -13.50

Dyes, coaltar, certified colors for drugs and cosmetics, external use, 500-lb. and 1-lb. lots dlvd:—
Blue, Ext., D&C, No. 1, cns lb.15.65 -16.10
Green, Ext., D&C, No. 1, cns lb.15.65 -16.10
Red, Ext., D&C, No. 1, cns. lb.13.05 -13.50
Yellow, Ext., D&C, No. 1, cns lb.10.50 -10.95

Dyes, coaltar for general use in cloth dyeing (numbers are those of the Colour index scale or prototype), contract, dlvd. No.
11110 Brilliant scarlet BN lb. 1.70 - —
13390 Fast blue SR lb. 1.30 - —
14025 Yellow 2G lb. 1.18 - —
14030 Orange R, extra, conc. lb. 1.52 - —
14645 Chrome black T lb. .73 - —
14720 Rubine XX, conc. lb. 1.47 - —
15510 Orange Y, extra conc. lb. .79 - —
15575 Orange RR lb. .94 - —
15620 Fast Red A, conc. lb. 1.53 - —
15705 Chrome blue black R, conc. lb. 1.07 - —
16150 Scarlet 2RL lb. 1.16 - —
16230 Fast light, orange 2G lb. 1.29 - —
16255 Brilliant scarlet 3RN, conc. lb. 1.20 - —
17590 Brown PG lb. 3.00 - —
17820 Diazo brilliant scarlet ROAD lb. 3.62 - —
18050 Phloxine 2G lb. 1.05 - —
18055 Fuchsine 6B lb. 1.55 - —
18965 Fast Yellow 2G lb. 2.32 - —
19140 Yellow XX lb. 2.30 - —
19555 Yellow NN, conc. lb. 3.67 - —
20170 Brown Y lb. 1.27 - —
20470 Blue black, extra, conc. lb. 1.37 - —
21010 Brown, RX, conc. lb. 1.35 - —
22240 Scarlet B lb. 2.60 - —
22310 Red FC lb. 1.45 - —
22311 Brown MCW lb. 1.40 - —
22590 Diazo black BHD lb. .93 - —
22610 Blue 2B, extra conc. lb. 1.53 - —
23500 Red, 4BX, conc. lb. 1.69 - —
24410 Sky blue FF, extra, conc. lb. 1.95 - —
24895 Brilliant yellow conc. lb. 3.11 - —
26400 Navy blue 3R, conc. lb. 1.70 - —
26695 Black F, conc. lb. 2.19 - —
26900 Milling Red 3R, conc. lb. 1.91 - —

...now available in truckload shipments

JEFFERSON CHEMICAL'S
ETHYLENE CARBONATE
PROPYLENE CARBONATE

99% MINIMUM PURITY

Jefferson has been a leader in the commercial development of these alkylene carbonates and, in order to meet the growing demand for these highly versatile materials, now maintains a minimum inventory of 10,000 pounds of each. The purity of both products is in excess of 99% and truckload quantities are available on three weeks' notice.

These carbonates possess outstanding solvent properties for numerous polymeric and other relatively insoluble organic compounds. Their miscibility with many common solvents suggests selective or extractive solvent applications.

Carbamates are formed easily with ammonia and aliphatic amines, leading to applications in agricultural chemicals, plasticizers and resins. To effect alkoxylation, ethylene carbonate and propylene carbonate can be frequently substituted where the respective oxides are inconvenient to handle.

Because of its ability to produce carbon dioxide simultaneously with its reaction with many different substances, ethylene carbonate may find application as a blowing agent for plastic or elastomeric compositions. The low viscosity, high boiling point, and low freezing point of propylene carbonate suggest its use in hydraulic and other functional fluids.

Samples of ethylene carbonate and propylene carbonate will be supplied on request. Write for Jefferson technical bulletins on these carbonates to Jefferson Chemical Company, Inc., 1121 Walker Avenue, Houston 2, Texas.

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Ethylene Oxide, Glycols, Dichloride • Ethanolamines • Morpholine • Piperazine
Polyethylene Glycols • Nonyl Phenol • SURFONIC® Surface-Active Agents
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Soda Ash • Sodium Bicarbonate

Essential Chemicals From Hydrocarbon Sources

191

Dyes, coaltar for general use in cloth dyeing (numbers are those of the Colour Index scale or prototype) contract dlvd No.

27075	Neutral black 2B, conc.	lb.	2.61	—
27720	Gray L	lb.	2.08	—
29185	Fast scarlet 4BNC	lb.	2.12	—
30015	Diazo black VJ conc.	lb.	2.48	—
30235	Black EB, 200%	lb.	1.33	—
30045	Yellow brown K, extra	lb.	1.26	—
30295	Green BY, conc.	lb.	1.02	—
35660	Brown B	lb.	2.89	—
37565	Naphthol SWF	lb.	1.76	—
40000	Yellow 2G	lb.	1.31	—
41000	Yellow OX	lb.	2.45	—
42000	Green V, crystals	lb.	2.73	—
42040	Brilliant green G crystals	lb.	3.62	—
42090	Blue EG	lb.	1.85	—
42100	Milling green 6B, conc.	lb.	4.78	—
42650	Violet 4BXN	lb.	2.25	—
43820	Brilliant blue BBG	lb.	2.44	—
44045	Blue B, extra conc.	lb.	3.61	—
45170	Red BX	lb.	4.76	—
50415	Nigrosine SSJ	lb.	1.03	—
52015	Blue GXX	lb.	2.22	—
53185	Black, GXCF, conc.	lb.	.38	—
58005	Alizarin red SC	lb.	3.31	—
59700	Golden orange GFD, single paste	lb.	2.58	—
59710	Flaming orange 6RD double powder	lb.	4.70	—
59800	Dark blue BO, single paste	lb.	2.28	—
59825	Jade green NC supra, double paste	lb.	1.53	—
61570	Alizarin green CG extra	lb.	3.53	—
63010	Alizarin blue SAPG	lb.	3.78	—
63615	Alizarin blue black B	lb.	3.02	—
69825	Blue BLFD double paste	lb.	2.82	—
70800	Brown BR single paste	lb.	2.03	—

Dyes, coaltar, oil-soluble, 100-lb. drums dlvd. No.

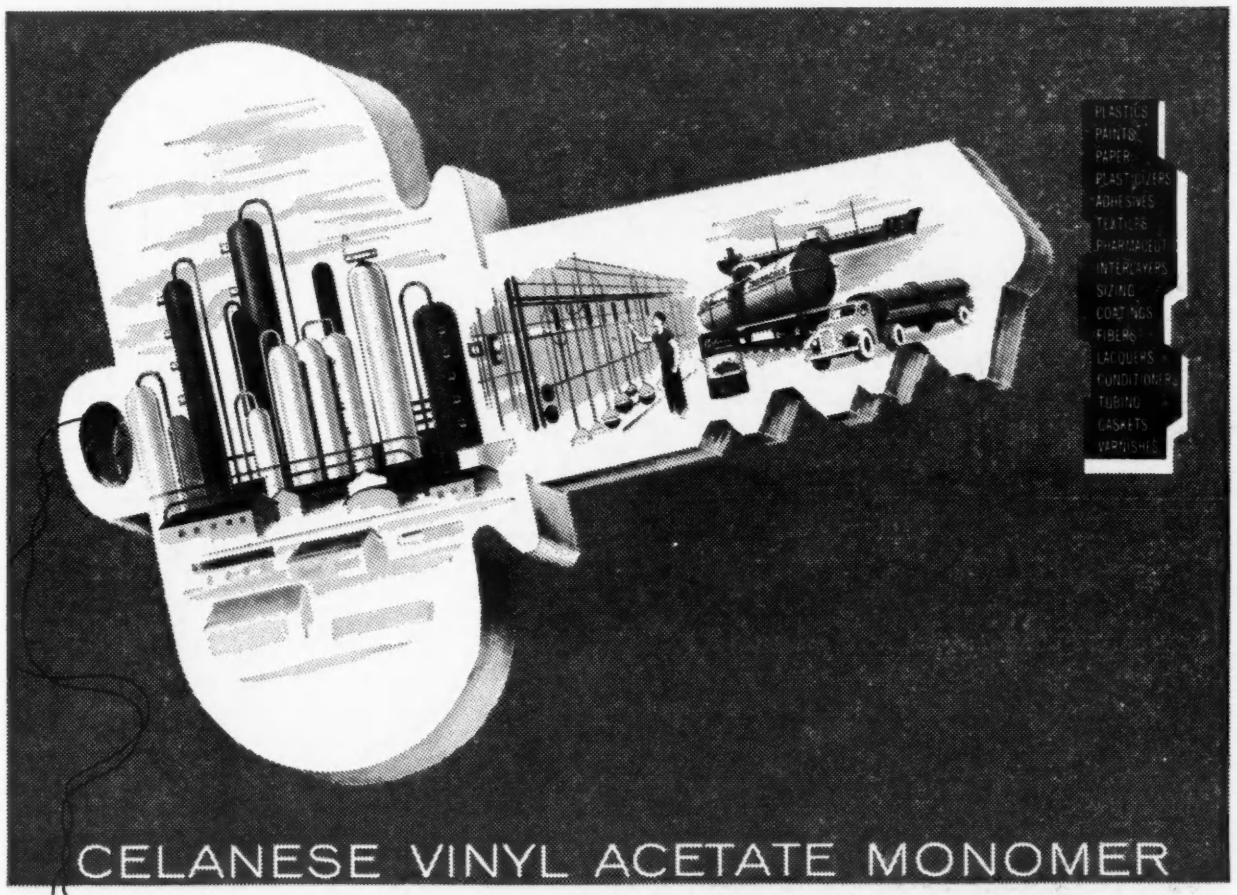
12140	Oil scarlet B	lb.	1.70	—
11160	Oil yellow T	lb.	2.79	—
12055	Oil orange 7078-V	lb.	5.87	—
26120	Oil red N-1700	lb.	1.76	—
42535B	Methyl violet base	lb.	1.76	—
44045B	Victoria blue base	lb.	4.06	—
50415B	Oil black 8603	lb.	.80	—
61565	Alizarin cyanine green base	lb.	6.13	—

Dyes, coaltar, spirit soluble, 100-lb. dms., dlvd. No.

	Spirit black RB	lb.	3.54	—
	Spirit brown GN	lb.	5.30	—
	Spirit orange R conc.	lb.	5.87	—
	Spirit red B conc	lb.	6.41	—
	Spirit yellow 2R conc.	lb.	4.62	—
12055	Spirit orange 7078-V	lb.	1.25	—
	Spirit blue THN	lb.	5.06	—

E

	Echinacea root, bls.	lb.	1.10	—
	Elm bark, grinding, bls.	lb.	.30	.32
	Powd., bbls., bxs.	lb.	.45	—
	Select, bundles	lb.	.75	—
	Emetine hydrochloride, USP, bots.	oz.	48.40	—
	Endrin, tech., dms., t.l., dlvd.	lb.	3.44	—
	Eosin red toner, bbls., works	lb.	1.85	—
	Ephedrine, syn., USP, anhyd., bots. 100-oz. lots	oz.	.98	1.00
	hydrous bots. 100-oz. lots	oz.	.92	—
	Ephedrine hydrochloride, NF, dms.,	oz.	.60	.65
	Ephedrine sulfate, USP, cryst., dms.,	oz.	.60	.80
	Powd., dms.	oz.	.60	.80
	Epichlorohydrin, dms., c.l., dlvd	lb.	.32½	—
	dms., l.c.l., dlvd	lb.	.34	—
	tanks, dlvd.	lb.	.30	—
	Epsom salt (see Magnesium sulfate).			
	l-Epinephrine base, syn., USP, bots., 100 gram lots	gram.	.53	—
	Erigeron oil, cns.	lb.	11.00	—
	Ergot, NF, dms., tin-lined	lb.	1.60	—
	Eserine salicylate, bots.	oz.	54.75	—
	Eserine sulfate, bots.	oz.	86.00	—
	Ester gum, gum-rosin type, dms., c.l., dlvd., Ill., Md., Ky., E. States, Minneapolis, N. C., Ohio, St. Louis, St. Paul, Va., W. Va.	lb.	.17	—
	Ester gum, wood-rosin type, dms., c.l., same basis	lb.	.17	—
	Ether (see specific product).			
	Ethyl acetate, nat., ferment, 85-88%, dms., c.l., dlvd.	lb.	.13	—
	dms., l.c.l., dlvd	lb.	.16½	—
	tanks, dlvd.	lb.	.12½	—
	95-98%, dms., c.l., dlvd	lb.	.15¼	—
	dms., c.l., dlvd	lb.	.15¼	—
	dms., l.c.l., dlvd	lb.	.16¾	—
	tanks, dlvd.	lb.	.12¾	—
	99%, dms., c.l., dlvd.	lb.	.15½	—
	dms., l.c.l., dlvd	lb.	.17	—
	tanks, dlvd.	lb.	.13	—
	Syn., 85-88%, dms., c.l., dlvd	lb.	.15	—
	dms., l.c.l., dlvd	lb.	.16½	—
	tanks, dlvd.	lb.	.12½	—
	95-98%, dms., c.l., dlvd	lb.	.15¼	—
	dms., l.c.l., dlvd	lb.	.16¾	—
	tanks, dlvd.	lb.	.12¾	—
	99%, dms., c.l., dlvd.	lb.	.15½	—
	dms., l.c.l., dlvd	lb.	.17	—
	tanks, dlvd.	lb.	.13	—
	Ethyl acetoacetate, dms., c.l., dlvd.	lb.	.58½	—
	dms., l.c.l., dlvd.	lb.	.60	—
	tanks, dlvd.	lb.	.56	—
	Ethyl acrylate, dms., c.l., t.l., dlvd.	lb.	.36	—
	dms., l.t.l., dlvd.	lb.	.37	—
	tanks, dlvd.	lb.	.34	—
	Ethyl alcohol, 190 pf., USP, tax paid dms., c.l., dlvd. E. of Rockies	gal.	20.63	—
	dms., l.c.l., same basis	gal.	20.68	-20.74
	Ethyl alcohol, 190 pf., USP, tax-free, dms., c.l., dlvd. E. of Rockies	gal.	.68	—
	dms., l.c.l., same basis	gal.	.73	.79
	tanks, same basis	gal.	.52	—
	Ethyl alcohol, absolute, 200 pf., tax paid, dms., dlvd. E. of Rockies	gal.	21.75	—
	dms., l.c.l., same basis	gal.	21.80	-21.86
	tanks, same basis	gal.	21.59	—
	Ethyl alcohol, denatured (see Denatured alcohol, ethyl).			
	Ethyl aminobenzoate, USP (see Benzocaine).			
	Ethyl amyl ketone, dms., c.l., dlvd.	lb.	.20	—
	dms., l.c.l., same basis	lb.	.21½	—
	tanks, same basis	lb.	.17½	—
	Ethyl benzoate, bots.	lb.	.90	—
	Ethyl bromide, tech., 98%, dms., c.l., frt. alld. E	lb.	.43	—
	dms., l.c.l., frt. alld. E	lb.	.45	—
	tanks, frt. alld. E.	lb.	.41	—
	2-Ethyl butyl alcohol, dms., c.l., works	lb.	.30	—
	dms., l.c.l., works	lb.	.30¾	—
	tanks, works	lb.	.28	—
	Ethyl butyl ketone, dms., c.l., t.l., works	lb.	.36	—
	dms., l.c.l., l.t.l., works	lb.	.36¾	—
	tanks, works	lb.	.34	—
	Ethyl butyrate, works	lb.	.90	1.00
	Ethyl carbamate (see Urethane).			
	Ethyl cellulose, vis. 7 cps., bgs., 5,000-lb. lots or more, frt. alld. E	lb.	.73	—
	bgs., smaller lots, frt. alld. E	lb.	.75	—
	Ethyl cellulose, vis. 10, 20, 50, 100, 150 cps., bgs., 5,000-lb. lots or more, frt. alld. E	lb.	.68	—
	bgs., smaller lots, frt. alld. E	lb.	.70	—
	Ethyl chloride, tech., cyls., works	lb.	.20	.22
	dms., works	lb.	.18	.20
	tanks, works	lb.	.10	—
	Ethyl cinnamate, cns.	lb.	3.35	3.50
	Ethyl ethanolamines, mixed, dms., c.l., dlvd. E	lb.	.43½	—
	dms., l.c.l., dlvd. E	lb.	.44½	—
	tanks, dlvd. E	lb.	.41½	—
	Ethyl ether, absolute, ACS, dms	lb.	.27	—
	Anesthesia, USP, dealers, 1-lb. cns	lb.	1.01	—
	½-lb. cns.	lb.	1.09	—
	¼-lb. cns.	lb.	1.21	—
	Ethyl ether, indust., dms., c.l., dlvd.	lb.	.13½	—
	dms., l.c.l., dlvd E	lb.	.15	—
	tanks, dlvd. E	lb.	.11	—
	2-Ethyl hexoic acid, dms., c.l., t.l., dlvd. E	lb.	.37	—
	dms., l.c.l., l.t.l., dlvd. E.	lb.	.38½	—
	tanks, dlvd. E	lb.	34½	—
	2-Ethyl hexoic acid, 1c. higher W. of Rockies.			
	2-Ethylhexyl acrylate, c.l. or t.l., straight or mixed frt. alld. E	lb.	.42½	—
	dms., l.t.l., same basis	lb.	.43½	—
	tanks, same basis	lb.	.40	—
	Prices of 2-ethylhexyl acrylate are 1½c. per lb. higher in Ariz., Calif., Idaho, Nev., Ore., Utah and Wash.			
	2-Ethylhexyl alcohol, dms c.l., dlvd.	lb.	.23¾	—
	dms., l.c.l., dlvd.	lb.	.25¼	—
	tanks, dlvd.	lb.	.21¼	—
	Ethyl iodide, cbys., works	lb.	3.30	—
	Ethyl methacrylate, dms., c.l., frt. equald	lb.	.52	—
	dms., l.t.l. frt. equald.	lb.	.52½	—
	tanks, frt. equald.	lb.	.50	—
	Ethyl morphine hydrochloride, USP, bots	oz.	11.83	—
	Ethyl oenanthate, dms.	lb.	1.20	1.50
	Ethyl oxalate (see Diethyl oxalate).			
	Ethyl silicate, dist. (see Tetraethyl orthosilicate).			
	Ethyl silicate, 40% available SiO, dms., c.l., dlvd.	lb.	.44½	—
	dms., l.c.l., dlvd.	lb.	.46	—
	tanks, dlvd.	lb.	.42	—
	N-Ethyl-a-naphthylamine, dms., works	lb.	1.02	—
	N-Ethyl-m-toluidine, tech., liq., tanks, frt. alld	lb.	.83	—
	N-Ethyl-o-toluidide, bbls.	lb.	.83	—
	Ethylamine (see Mono-, Di-, or Tri-).			
	N-Ethylaniline, dms., c.l., frt. alld.	lb.	.57	—
	dms., l.c.l., frt. alld.	lb.	.58	—
	tanks, frt. alld.	lb.	.55	—
	Ethylbenzene 99% dms., c.l. or t.l., frt. equald	lb.	.15	—
	dms., l.c.l., same basis	lb.	.17	—
	tanks, same basis	lb.	.12½	—
	2-Ethylbutyl alcohol, dms., c.l., works	lb.	.30	—
	dms., l.c.l., works	lb.	.30¾	—
	Ethylene, contract, ref'y. gate	lb.	.0475	.0525
	Ethylene dibromide, dms., c.l., frt. equald	lb.	.30½	—
	dms., l.c.l. frt. equald.	lb.	.31½	—
	tanks, frt. equald	lb.	.28½	—
	Ethylene dichloride, dms., c.l., dlvd.	lb.	.11½	—
	dms., l.c.l., same basis	lb.	.13	—
	tanks, same basis	lb.	.09	—
	Ethylene dichloride prices W of Rockies, 1c. per lb. higher.			
	Ethylene glycol, indust., dms., c.l., dlvd. E	lb.	.16	—
	dms., l.c.l., same basis	lb.	.17	—
	tanks, same basis	lb.	13½	—
	Ethylene glycol monobutyl ether, dms., c.l., dlvd. E	lb.	.22	—
	dms., l.c.l., dlvd. E.	lb.	.23	—
	tanks, dlvd E.	lb.	.19½	—
	Ethylene glycol monoethyl ether, dms., c.l., dlvd E	lb.	.21	—
	dms., l.c.l., dlvd. E.	lb.	.22	—
	tanks, dlvd. E.	lb.	.18½	—
	Ethylene glycol monoethyl ether acetate, dms., c.l., dlvd. E	lb.	.19½	—
	dms., l.c.l., dlvd. E.	lb.	.20½	—
	tanks, dlvd., E.	lb.	.17	—
	Ethylene glycol monomethyl ether, dms., c.l., dlvd. E	lb.	.21	—
	dms., l.c.l., dlvd E.	lb.	.22	—
	tanks, dlvd., E.	lb.	.18½	—
	Ethylene glycol monomethyl ether acetate dms., c.l., dlvd. E	lb.	.29	—
	dms., l.c.l., dlvd. E.	lb.	.29¾	—
	tanks, dlvd. E.	lb.	.27	—
	Ethylene glycol monostearate, triple pressed, dms	lb.	.33	.35
	Ethylene oxide, dms c.l., dlvd E.	lb.	.21½	—
	dms., l.c.l., dlvd. E.	lb.	.24½	—
	tanks, dlvd. E.	lb.	.15½	—



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Celanese®

Celanese CHEMICALS

Ethylene trichloride (see Trichloroethylene)
Ethylenediamine 85-88%, dms. c.l., dlvd E., 100% basis lb 42 —
dms. l.c.l. dlvd E. 100% basis lb 43 —
tanks, dlvd E., 100% basis lb 40 —
Ethylvanillin, 100 lb fib dms., 500-lb lots and over lb 6.75 —
Eucalyptol, USP, cns., dms lb .90 1.40
Eucalyptus oil NF rectified 70-75%, dms lb. .51 —
NF, rectified, 80-85% dms. lb 57 .95
Eugenol, USP, dms lb. 1.90 - 2.15
Tech., dms. lb. 1.45 - —
Eupatorium herb bls lb 15 .17

F

F salt, paste, tech., dms. works lb 2.30 - —
Feldspar 140-200 mesh bulk, c.l., works ton.19.50 - —
Feldspar in bags $3 per ton higher
Fennel oil, sweet, USP, cns .. lb. 3.10 - —
Fennel seed Argentine bgs .. lb .14 - —
French, light, bgs lb .21 - —
Indian, light, bgs. lb. .21 - —
Rumanian, bgs. lb .14 - —
Yugoslav, light, bgs. lb. .19 - —
Fenugreek seed, Moroccan, bgs lb 07½ —
Ferric chloride, anhyd., tech., dms., c.l., works 100 lbs 7.50 - —
dms. l.c.l., works 100 lbs 8.50 - —
Indust., cryst., anhy. c.l., works 100 lbs 5.25 6.75
bbls. l.c.l., works 100 lbs 5.75 7.25
Ferric chloride, 42°Be., photo grade, cbys., c.l., works 100 lbs 7.25 8.25
sewage grade, tanks frt equald. 100% basis 100 lbs 4.00 —
USP, cryst., dms., works lb 07½- .09
Ferric citrate, gran. dms. lb .86 - —
Ferric hypophosphite NF dms lb 3.45 - —
Ferric naphthenate, liq., 6% Fe, dms. frt alld lb 28¼ - —
Ferric oxalate, tech., gran., 50-lb. dm., f.o.b. works E lb. .89 - —
Ferric oxides (see iron oxides)
Ferric phosphate, NF soluble gran pearls, cs lb 72 - .75
Ferric pyrophosphate, NF VII, soluble, gran. pearls, dms lb 79 - —
Ferric resinate 6¾% Fe., dms., ton, lots, frt alld lb 36½ - —
Ferric stearate dms c.l. frt alld. lb 39 - —
dms. l.c.l., frt alld. lb 40 - .44
Ferric sulfate partly hydrated, bgs., c.l works ton.35.25 - —
bgs., l.c.l. works ton.36.25 - 42.25
bulk, c.l., works ton.33.25 - —
Ferric-ammonium citrate, brown, pearls, NF, gran., dms lb. .65 .68
Green, pearls, USP XII, gran., dms lb .66 .69
Ferric-ammonium oxalate, fine gran., dms lb. .27½- .29½
Ferric-potassium oxalate, fine gran., dms lb. .32½- .34½
Ferric-sodium oxalate, fine gran., dms lb. .27½- .29½
Ferrous gluconate, USP, 200-lb. dm., frt. equald lb. .96 - —
Ferrous sulfate gran., bgs., c.l., works ton.34.50 - —
bgs., l.c.l., dlvd. Metropolitan area, 100 lbs 3.35 4.25
bbls., c.l., works ton.40.00 - —
bulk, c.l., works ton.27.00 - —
USP, cryst., bbls., dms. lb. .09½- .10
Fir balsam, Canada, bbls. gal.32.00 -35.00
Oregon, bbls. gal. 4.05 - 5.00
Fir oil, Canada, cns. lb. 2.85 4.00
Fish oil, refd., alkali, dms lb. .1250- .1300
Kettle-bodied, dms lb. .1480- .1530
Light-pressed, dms. lb. .1100- .1150
tanks lb. .0950- —
Fishliver oil, high potency, 100,000 A units per gram, dms. 1,000,000 units. .16 - —
200,000 A units per gram, dms. 1,000,000 units. .17½ - —
500,000 A units per gram, dms., 1,000,000 units. .18 - —
Fishmeal, dom., menhaden, 60% protein, grd., bgs., Atlantic coast ton.150.00 - —
Fishscrap, dom., menhaden, dried, 60% protein, grd., bgs., Atlantic coast ton.146.00 Nom.
Fleaseed (see Psyllium seed).
Folic acid, USP, bots., fib dms., kilo or more gram. .44 - —
10% feed grade, fib dms., 3 kilos or more kilo.44.00 - —
Formaldehyde, 37%, (inhibited 7 to 8% methanol), USP, dms., c.l., dlvd lb. .0645- —
tanks, dlvd. lb. .0380- —
Formaldehyde, 37%, (inhibited, 12 to 15% methanol), USP, dms., c.l., dlvd lb. .0670- —
tanks, dlvd. lb. .0405- —
Formaldehyde, methanol-free (uninhibited), tanks, dlvd lb. .0350- —
Formic acid, 85%, cbys. c.l., works, lb. .1570- —
cbys., l.c.l., works lb. .1620- .1720
90%, cbys., c.l., works lb. .1625- —
cbys., l.c.l., works lb. .1675- .1775
Fringetree bark, bls. lb. .60 - .61
Fuller's earth, bgs., c.l., Ill. mines, ton.19.00 - —
Fuller's earth, calcined, bgs., c.l., same basis ton.20.00 -21.75
Insecticide grade, dried, powd., bgs., c.l., Ga. or Fla. mines ton.17.50 - —
Oil-bleaching grade, 100-mesh, bgs., c.l., same basis ton.16.30 -17.00
200-mesh, bgs., c.l., same basis, ton.17.50 -18.00
Spent, bgs., c.l., ship't point ton 4.50 5.00
Fumaric acid, tech., 250-lb. dm., c.l., frt. alld. lb. .27¼- —
dms., l.c.l., same basis lb. .28¼- —
Prices of fumaric acid 1½c. per lb higher west of Denver.
Furfural, dms., c.l. works lb. .13 - —
dms., l.c.l., works lb. .14 - —
tanks, dlvd E. lb. .12 - —
tanks, dlvd W. lb. .13 - —
Furfuryl alcohol, cns., works lb. .29 - —
dms., l.c.l., Memphis, Tenn. lb. .21 - —
tanks, Memphis, Tenn. lb. .184 - —
Furfuryl alcohol, dms. c.l. Newark, N. J lb. .21½- —
dms., l.c.l., Newark, N. J. lb. .22½- —
Fusel oil, refd., dms., c.l., dlvd lb. .18 - —
dms., l.c.l., dlvd lb. .19½- —
tanks, dlvd. lb. .15½- —

G

G salt, bbls., frt. alld., 100% basis lb. .73 - —
Gallic acid, NF VII, bbls., 1,000-lb. lots lb. 2.00 - —
bbls., smaller lots lb. 2.02 - 2.22
Gallic acid, tech., bbls., 1,000-lb. lots lb. 1.76 - —
bbls., smaller lots lb. 1.80 - 2.00
Gamma acid, dry grd., bbls., frt. alld lb. 1.75 - —
Paste, bbls., frt. alld lb. 1.70 - —
Gammapicoline (see g-picoline).
Garlic oil, dom., bots. oz. 4.75 - 6.05
imp., bots. oz. 4.50 - 5.00
Gaultheria oil (see Wintergreen oil).
Gelatin, edible, pure pork skin),
75 AOAC test, bbls., c.l lb. .54 - —
150 AOAC test, bbls., c.l. lb. .65 - —
200 AOAC test, bbls., c.l. lb. .71 - —
225 AOAC test, bbls., c.l. lb. .74 - —
275 AOAC test, bbls., c.l. lb. .83 - —
Gelsemium root, bls. lb. .26 - —
Gentian root, bls. lb. .25 - —
Grd., bbls., bxs. lb. .30 - —
Powd., bbls., bxs. lb. .30 - .32
Geraniol, extra, cns., dms. lb. 1.90 - 3.00
Standard, cns., dms. lb. 2.00 - 3.40
soap grade, dms lb. 1.10 - 1.75
Geranium oil, Algerian, cns. lb.19.50 - —
Bourbon, cns. lb.21.00 -22.00
Geranium oil, Turkish (see Palmarosa oil).
Geranyl acetate, cns. lb. 2.00 - 2.70
Ginger oil, dist., bots lb.10.50 -14.00
Ginger oleoresin, NF, from African root, bots lb. 5.00 - 5.60
NF, from Jamaican root, botts. lb. 8.75 -10.25
Ginger root, Cochin, bgs. lb. .17 - —
Jamaican, No. 3, bgs lb. .32 - —
Nigerian, split, bgs lb. .13 - —
Sierra Leone, bgs lb. .19 - —
Glauber's salt (see Sodium sulfate).
Gluconic acid, tech., 50%, dms., c.l., t.l., frt. alld lb. .18 - —
dms. l.c.l., frt. alld. lb. .20½- —
tanks, frt. alld. lb. .13½- —
Glue, bone, extracted, dry bone, 86 jellygrams, bgs. c.l., dlvd. lb. .15 - —
131 jellygrams, bgs., c.l., same basis lb. .17 - —
164 jellygrams, bgs., c.l., same basis lb. .17½- —
191 jellygrams, bgs., c.l., same basis lb. .19 - —
223 jellygrams, bgs., c.l., same basis lb. .23 - —
40 jellygrams, bgs., c.l., same basis lb. .16 - —
65 jellygrams, bgs., c.l., same basis lb. .16 - —
86 jellygrams, bgs., c.l., same basis lb. .16 - —
115 jellygrams, bgs., c.l., same basis lb. .16½- —
135 jellygrams, bgs., c.l., same basis lb. .17½- —
164 jellygrams, bgs., c.l., same basis lb. .18½- —
180 jellygrams, bgs., c.l., same basis lb. .19½- —
200 jellygrams, bgs., c.l., same basis lb. .20½- —
Bone glue, l.c.l., prices 1c higher.
Glue, hide, 70-94 jellygrams, bgs., c.l., dlvd lb. .16 - —
95-121, bgs., c.l., dlvd lb. .17 - —
122-149, bgs., c.l., dlvd lb. .18½- —
150-177, bgs., c.l., dlvd lb. .21 - —
178-206, bgs., c.l., dlvd lb. .23½- —
207-236, bgs., c.l., dlvd lb. .26 - —
237-266, bgs., c.l., dlvd lb. .28 - —
267-298, bgs., c.l., dlvd lb. .30 - —
299-330, bgs., c.l., dlvd lb. .32 - —
331-362, bgs., c.l., dlvd lb. .34 - —
363-394, bgs., c.l., dlvd lb. .36 - —
395-427, bgs., c.l., dlvd lb. .38 - —
428-460, bgs., c.l., dlvd lb. .40 - —
461-494, bgs., c.l., dlvd lb. .42 - —
495-529, bgs., c.l., dlvd lb. .44 - —
Hide glue, l.c.l., prices 2c higher.
l-Glutamic acid, 99½%, fib. dms., 100-lb lots, frt. alld lb. 1.80 - —
fib. dms., 25-lb. lots, frt. alld. lb 1.85 - —
l-Glutamine, bots., 1-9 kilo lots, gram. .15 - —
Glycerine, dom., nat., crude, saponification, 88%, tanks dlvd E. lb. .19½- —
nat., crude, soaplye, 80%, tanks, dlvd. E lb. .18 - —
Imp., nat., crude, soaplye, 80%, c.l.f lb. .17 Nom.
Glycerine, nat., refd., USP CP, 99%, dms., c.l., dlvd lb. .29¾- —
dms., l.c.l., dlvd lb. .29⅞- —
tanks, dlvd. lb. .27½- —
USP, 96%, dms., c.l., dlvd lb. .23½- —
dms., l.c.l., dlvd lb. .29 - —
tanks, dlvd. lb. .23¾- —
high gravity, dms., c.l., dlvd lb. .29¼- —
dms., l.c.l., dlvd. lb. .29¾- —
tanks, dlvd lb. .27½- —
Syn., dms., c.l., dlvd. lb. .29½- —
dms., l.c.l., dlvd. lb. .30 - —
tanks, dlvd. lb. .27¾- —

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8438

Glycine (see Aminoacetic acid).
Glycerol (see Glycerine).
Glycolic acid (see Hydroxyacetic acid).
Glyoxal, 30%, dms., c.l., works lb. .20½ - —
dms., l.c.l., works lb. .21¼ - —
tanks, works lb. .18 - —
Golden seal root, NF, tested, bls. lb. 3.50 - —
Gramidin, 1 to 5 kilos, f.o.b., works. gram. 4.70 - —
Grapefruit oil, dms. lb. 2.00 - 2.75
Graphite, amorp, powd., bgs., fib. dms., ex whse lb. .06 - .09½
cryst., 88-90%, powd., bgs., fib. dms. ex whse lb. .19 - .21½
cryst., 90-92%, ex whse. lb. .21 - .24½
powd., bgs., fib. dms., ex whse lb. .29 - .31½
Flake, No. 1, 90-95%, bgs., fib. dms., ex whse lb. .29 - .31
Flake, No. 2, 90-95%, bgs., fib. dms., ex whse lb. .29 - .31
Grease, white, choice all hog, tanks, dlvd. lb. .07½ - .07⅝
Yellow, tanks, dlvd. lb. .06¾ - .06⅞
Grease oil, No. 1, dms., c.l. lb. .15¾ - —
dms., l.c.l. lb. .16¾ - .18¼
extra winter, strained, dms., c.l. lb. .18¼ - —
dms., l.c.l. lb. .19¼ - .21¼
prime, burning, dms., c.l. lb. .19¾ - —
dms., l.c.l. lb. .20¾ - .22¾

Green Pigments

Green pigment quotations are listed individually. For example, prices on Green, chrome, may be found in the C's under Chrome green.

Grindelia robusta herb, bls. lb. .45 - —
Guaiacol, NF, cryst., dms., tips lb. 2.10 - 2.15
NF, liq., cbys., dms. lb. 2.30 - 2.40
Guaiacol carbonate, NF VII, dms. lb. 3.40 - 3.45
Guaiacwood oil, cns lb. .75 - 1.30
Guar gum, food grade, bgs., c.l. lb. .38 - .44
bgs., 5,000 lbs. or more lb. .39 - .44
Indust., bgs., c.l. lb. .32 - —
Tech. grade, bgs. lb. .30 - .33

Gums

Gum quotations are listed individually. For example, prices on Gum, Dammar, may be found in the D's under Dammar gum.

Gypsum, plaster of Paris, 100-lb. paper bgs., trucks, dlvd. New York ton. 20.30 - —
Terra alba, dom., 100-lb. paper bgs., trucks, same basis ton. 20.00 - —
100-lb. paper bgs., trucks, works, New York ton. 17.00 - —
l.c., imp., English, 100-lb. paper bgs., ex dock, New York. ton. 55.00 - —
100-lb paper bgs., ex whse. ton. 60.00 - 62.00

H

H acid, dry, bbls., c.l., frt. alld., 100% basis lb. .90 - —
bbls., l.c.l., same basis lb. .95 - —
Hansa yellow, 10 G, bbls., dlvd. E. of Rockies lb. 2.45 - —
Hansa G yellow, pigment, bbls. lb. 2.20 - —
Hawthorn berries, bgs. lb. .21 - —
Heliotropin, 100-lb. lots, dms. lb. 2.50 - 3.00
Hellebore root, dom., green, bls lb. .70 - .75
Helonias root, bls. lb. 1.75 - 2.00
Hemlock oil, cns. lb. 2.85 - 3.55
Henbane leaves, bls. lb. .30 - .35
Heptachlor, dms., c.l., t.l., 100% basis, frt. alld lb. .90 - —
Heptane, indust., tanks, Bayonne, N. J. gal. .20 - —
tanks, Baytown, Tex. gal. .16¼ - —
tanks, Borger, Tex. gal. .16¼ - —
tanks, Houston, Tex. gal. .16¼ - —
Hesperidin, purif., 100-lb. fib. dms., f.o.b., works lb. 8.95 - —
Hesperidin methylchalcone, bots., 50-lb. lots, works lb. 22.50 - —
bots., 5-lb. lots, works lb. 23.00 - —
bots., 1-lb. lots, works lb. 23.50 - —
Hexachlorophene, dms. lb. 1.94 - —
Hexalin (see Cyclohexanol).
Hexamethylenetetramine, tech., bgs., 20,000-lb. lots or more, Perth Amboy or New York lb. .233 - —
bgs., 1,000-19,999-lb. lots, same basis lb. .243 - —
bgs., smaller lots, same basis lb. .253 - —
fib. dms., 1,000-lb. lots or more, same basis lb. .250 - —
fib. dms., smaller lots, same basis lb. .253 - —
USP, bgs., 500 lbs. or more, f.o.b. Fords, N. J., dlvd. New York and Philadelphia lb. .42½ - —
bgs., smaller lots, same basis lb. .43½ - .48½
Hexane, indust., tanks, Bayonne, N. J. gal. .20 - —
tanks, Borger, Tex., dlvd. gal. .16 - —
tanks, Houston, Tex. gal. .16 - —
1-Hexanol, dms., c.l., works lb. .35 - —
dms., l.c.l., works lb. .35¾ - —
tanks, works lb. .33 - —
Hexyl cinnamic aldehyde, dms. lb. 4.00 - 7.50
n-Hexyl methacrylate, dms., c.l., works lb. .75½ - —
dms., l.c.l., works lb. .76 - —
Hexyl salicylate, dms. lb. 1.75 - —
Hexylene glycol, dms., c.l., dlvd. lb. .17½ - —
dms., l.c.l., dlvd. lb. .19 - —
tanks, dlvd. lb. .15 - —
Hexylresorcinol, USP, dms., 25-lb. lots or more, dlvd lb. 14.00 - —
dms., smaller lots, dlvd. lb. 14.50 - —
Homatropine hydrobromide, USP, bots. oz. 3.50 - —
Homatropine methylbromide, USP, bots. oz. 3.25 - —
Hoofmeal, 17-18% ammonia, bulk, c.l., Chicago unit-ton. 6.75 - —
Horehound herb, bls. lb. .16 - .19
Hydrastis (see Goldenseal).
Hydrazine hydrate, 85% ret. dms., works lb. 1.35 - 1.53
100%, ret. dms., works lb. 1.60 - 1.90
Hydriodic acid, 1.50 s.g., cbys. lb. 2.92 - —
1.70 s.g. cbys. lb. 3.23 - —
Hydroabietyl alcohol, tech., solid, dms., c.l., dlvd. zone 1 lb. .29¼ - —
dms., l.c.l., dlvd. zone 1 lb. .29¾ - .30¼
tanks, dlvd. zone 1 lb. .27¼ - —

Zone 1 for hydroabietyl alcohol comprises all of continental US except Ariz., Calif., Colo., Idaho, Mont., Nev., N. M., Ore., Utah, Wash., Wyo., and the western part of Texas.

Hydrobromic acid, medicinal, 48%, cbys., frt. equald lb. .48 - .56
Hydrochloric acid, anhyd. (see Hydrogen chloride)
Hydrochloric acid, 18°, cbys., c.l., works 100 lbs. 2.50 - —
cbys., l.c.l., dlvd. Metropolitan area 100 lbs. 2.90 - 3.03
tanks, works, frt. equald ton. 28.00 - —
20°, cbys., c.l., works 100 lbs. 2.75 - —
cbys., l.c.l., dlvd. Metropolitan area 100-lbs. 3.15 - —
tanks, works frt. equald ton. 30.00 - —
22°, cbys., c.l., works 100 lbs. 3.25 - —
cbys., l.c.l., dlvd. Metropolitan area 100 lbs. 3.63 - —
tanks, works frt. equald ton. 35.00 - —
Hydrochloric acid, CP, USP, consumers cbys. extra c.l. works lb. .15¾ - —
cbys., l.c.l., same basis lb. .17¼ - .17¾
Hydrochloric acid, 5-pint bots., extra cs., c.l., same basis lb. .20¾ - —
Hydrocortisone acetate, bulk, bots., kilo lots or more gram. 1.60 - 1.80
Hydrocortisone alcohol, bulk, bots., kilo lots or more gram. 1.60 - 1.80
Hydrocyanic acid, dilute, NF, 2%, 5-lb. bots lb. .40 - —
Hydrofluoric acid, anhyd. (see Hydrogen fluoride)
Hydrofluoric acid, aqueous, 70%, 55-gal. dms., c.l., t.l., dlvd. 100 lbs. 19.25 - —
55-gal. dms., l.c.l., l.t.l., dlvd. 100 lbs. 20.75 - —
20-gal. dms., c.l., t.l., dlvd. 100 lbs. 21.00 - —
20-gal. dms., l.c.l., l.t.l., dlvd. 100 lbs. 22.50 - —

Hydrofluoric acid, aqueous, 70%, tanks, works, frt. equald. 100 lbs. 15.50 - —

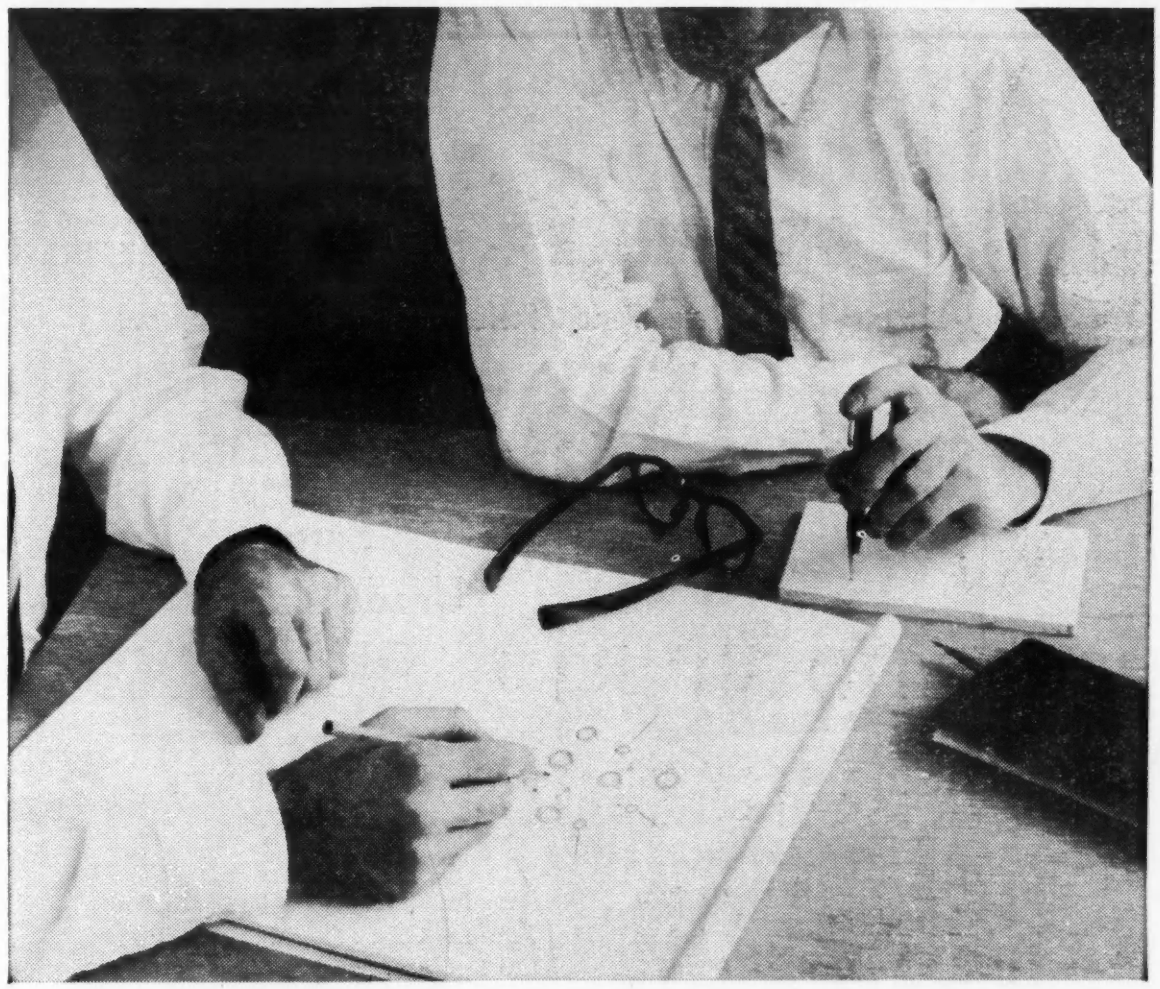
Delivered prices apply to all states east of Arizona, California, Colorado, Idaho, Montana, Nevada, New Mexico, Oregon, Washington and Wyoming. In those states add $2.70 per cwt. for drum delivery.

Hydrofluosilicic acid, dms., works, 30% basis lb. .06 - —
Hydrofuramide, dms., fib. ctns., works lb. .30 - .40
50-lb. cyls., l.c.l., works lb. .53 - .60
Hydrogen chloride, anhyd., 50-lb. cyls., l.c.l., works lb. .43 - —
Hydrogen cyanide, liq., 96%, tanks, works lb. .16 - —
Hydrogen fluoride, anhyd., cyls., dlvd. E lb. .30½ - .32½
cyls. dlvd. W. lb. .39 - —
tanks, works lb. .21 - —
Hydrogen peroxide 35%, dms., c.l., dlvd lb. .202 - —
dms., l.c.l., dlvd. lb. .211 - —
tanks, dlvd. lb. .1800 - —
Hydroquinone, photo grade, dms. lb. 1.10 - 1.13
Tech., dms., c.l., dlvd. lb. .82½ - —
dms., l.c.l., dlvd. lb. .84½ - —
Hydroxyacetic acid, tech., 70%, dms., Philadelphia and Chicago lb. .11 - —
tanks, Belle, W. Va. lb. .073 - —
Hydroxycitronellal, cns. lb. 4.00 - 4.80

Hydroxyethyl cellulose, low viscosity grades, 20,000-lb. lots or more, f.o.b. shipping point lb. .96 - —
2,000 to 19,999-lb. lots, same basis lb. .99 - —
150 to 1,999-lb. lots, same basis. lb. 1.02 - —
Less than 150-lb. lots, same basis lb. 1.12 - —
Hydroxyethyl cellulose high viscosity grades, 20,000-lb lots or more, more, f.o.b. shipping point lb. 1.01 - —
2,000 to 19,999-lb. lots, same basis lb. 1.04 - —
Hydroxyethyl cellulose, 85 to 1,999-lb. lots, same basis lb. 1.07 - —
Less than 85-lb lots, same basis. lb. 1.17 - —
Hyoscine salts (see Scopolamine)
Hyoscyamine hydrobromide, bots oz. 7.00 - —
Hyoscyamine sulfate, bots. oz. 7.00 - —
Hypophosphorous acid, purif. 50% cbys., ton lots, f.o.b. works lb. .85 - —
NF, 30%, cbys., all quantities, same basis lb. .73 - —

I

Ichthammol, NF, dms. lb. .75 - 1.05
Indigo (see Dyes coaltar, 1171 indigo, syn).
Indole, CP, bots lb. 15.75 - 18.25
Inositol, bots., dlvd. lb. 5.00 - —
dms., dlvd. lb. 4.50 - 4.75



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Insect flowers (see Pyrethrum).
Iodine, crude, kgs. ..... lb. .95 - —
Resub., USP, dms., f.o.b. works lb. 2.00 - 2.02
Iodochlorohydroquinolin, USP, dms. lb. 3.60 - —
Iodoform, NF, dms., kgs. ..... lb. 4.90 - 5.00
a-Ionone, cns. ..... lb. 3.85 - 5.00
b-Ionone, cns. ..... lb. 3.85 - 5.85
Ipecac root, whole, bgs ..... lb 8.00 - 8.50
Powd., bbls. bxs. ..... lb. 9.50 -10.00
Irish moss, bleached, prime, bls lb. .28 - .34
Iron blue, alkali-resisting, bbls., c.l., dlvd. E lb. .57 - —
bbls. l.c.l. ton lots same basis. lb. .58 - —
bbls., smaller lots same basis. lb. .59 - —
Iron blue, dom., reg., bbls., c.l., dlvd. E lb. .52 - —
bbls., l.c.l., ton lots, same basis lb. .53 - —
bbls., smaller lots, same basis. lb. .54 - —
Iron blue, imp., British, reg., bbls., c.l., dlvd. E lb. .48 - —
bbls., l.c.l., ton lots, same basis lb. .49 - —
bbls., smaller lots, same basis. lb. .50 - —
Iron blue dlvd. prices 1c. higher for Pacific Coast states:—Wash., Ore., Cal., N. M., Ariz., Mon. Wyo. Utah, Col and Nev.
Iron compounds (see Ferric or Ferrous)
Iron oxide, black, pure, bgs., c.l., works lb. .14¾- —
bgs., l.c.l., works ..... lb. .15 - —
Iron oxide, brown, pure, bgs., c.l., works lb. .14¼- —
bgs., l.c.l., works ..... lb. .14½- —
Iron oxide, metallic, brown, bgs., works lb. .05¼- —
Iron oxide, Persian Gulf, red, bgs., c.l., works lb. .08¾- —
Iron oxide, red, dom., pure, bgs., Bethlehem, Easton, E. St. Louis, N. Y lb. .14¼- —
Iron oxide, red, nat., 75-85% ferric oxide, bgs., c.l., works lb. .06¼- —
bgs., l.c.l., works ..... lb. .06½- —
Iron oxide, Spanish red, bbls., c.l., ex dock lb. .05¾ Nom.
bbls., l.c.l., ex dock ..... lb. .06 Nom.
bbls., l.c.l., ex whse. New York. lb. .06½ Nom.
Iron oxide, yellow, nat., French type, bgs., c.l., works lb. .06¼- —
Peruvian type, bgs., l.c.l. lb. .023 - .024
Iron oxide, yellow, pure, light lemon shade, bgs. c.l., works lb. .12¼- —
Other shades, same basis lb. .12 - —
Isoamyl alcohol, dms., c.l., works, frt. alld. E lb. .27½- —
dms., l.c.l., same basis ..... lb. .29 - —
tanks, same basis ..... lb. .25 - —
Isoborneol, cns. ..... lb. 1.44 - 1.80
Isobornyl acetate, cns. ..... lb. .48 - .56
Isobornyl formate, dms. ..... lb. 1.20 - —
Isobornyl propionate, dms. ..... lb. 1.25 - 1.35
Isobutyl acetate, perfume grade, cns lb. .75 - 1.00
Solvent grade, dms., c.l., dlvd. E. of Rockies lb. .15¼- —
dms., l.c.l., same basis ..... lb. .16¾- —
tanks, same basis ..... lb. .12¾- —
Isobutyl alcohol, dms., c.l., dlvd. lb. .16 - —
dms., l.c.l., dlvd ..... lb. .17½- —
tanks, dlvd. ..... lb. .13½- —
Isobutyraldehyde, CP, dms., c.l., dlvd lb. .27½- —
dms., l.c.l., dlvd. ..... lb. .28½- —
Isobutyraldehyde, tech., dms., c.l., dlvd lb. .22 - —
dms., l.c.l., dlvd. ..... lb. .23 - —
tanks, dlvd. ..... lb. .19½- —
Isoeugenol, cns. ..... lb. 4.40 - —
Isoniazid, powd., kilo or more kilo. 18.00 - —
Isonicotinic acid, 100-lb. fib dms., works lb. 4.25 - —
Isonicotinic acid hydrazide (see Isoniazid).
Iso-octyl alcohol, dms., c.l., dlvd. E. lb. .23½- —
dms., l.c.l., dlvd. E ..... lb. .25 - —
tanks, dlvd. E. ..... lb. .21 - —
Isopentane, coml. grade, tanks, f.o.b. Tex. refy gal. .15½- —
Isophthalic acid, dms., c.l., works, frt. equald lb. .152 - —
dms., l.c.l., same basis ..... lb. .162 - —
Isopropanol (see Isopropyl alcohol).
Isophorone, dms., c.l., works ... lb. .24½- —
dms., l.c.l., works ..... lb. .25¼- —
tanks, works. ..... lb. .22½- —
Isopropyl acetate, dms., c.l., dlvd. lb. .14 - —
dms, l.c.l., same basis ..... lb. .15½- —
tanks, same basis ..... lb. .11½- —
Isopropyl alcohol, refd., 91%, dms., c.l., dlvd gal. .58 - —
dms., l.c.l., dlvd ..... gal. .68 - —
tanks, dlvd. lb .42 - —
Refd., 95%, c.l., dms., dlvd. gal. .60 - —
dms., l.c.l., dlvd ..... gal. 70 - —
tanks, dlvd. ..... gal. 44 - —
anhyd., c.l., dlvd ..... gal .62 - —
dms., l.c.l., dlvd ..... gal. 72 - —
tanks, dlvd. ..... gal. 46 - —
Isopropyl benzene (see Cumene).
Isopropyl ether, dms., c.l., dlvd lb. .09½- —
dms., l.c.l., dlvd ..... lb. .11 - —
tanks, dlvd ..... lb. .07 - —
Isopropyl-N-(3-chlorophenyl) carbamate (CIPC), tech., dms., c.l., t.l., works lb. 1.00 - —
dms., l.c.l., works ..... lb. 1.05 1.25
tanks, works. ..... lb. .99 —
Isopropylamine (see Mono, Di, or Tri-).
Isopropyl-N-phenyl carbamate, 450-lb. fib. dms., c.l., t.l., works lb. .75 —
450-lb fib dms., l.c.l., works lb. .80 .90
Isoquinoline dms., works ..... lb. .65 1.25
Itaconic acid, refd., bgs., c.l., f.o.b. works lb. .53½- —
bgs., l.c.l., same basis ..... lb. .54½- —
Tech., 250-lb. dms., c.l., same basis. lb. .39 - —
dms., l.c.l., same basis ..... lb. .40 - —

J

J acid, paste, bbls., works, 100% basis lb 2.70 - —
Powd., bbls., same basis ..... lb. 2.75 - —
Jalap root, NF, bls. ..... lb. .90 - —
NF, powd., bbls., bxs. ..... lb. 1.15 - —
Japan wax, cs ..... lb. .27 .29
Juniper berries, bgs. ..... lb .15 —
Juniper berry oil, bots. ..... lb 2.90 3.75
Twice rectified bots. ..... lb 3.60 7.00
Juniper tar oil, NF dms ..... lb. .42 .60
Juniper wood oil, tech. cns. ..... lb. .38 .55

K

Kaolin (see also Clay, China).
Kaolin, NF, powd., fib. dms. ..... lb. .10 - .12
NF, colloidal, 50-lb. bgs. ..... lb. .15½- .17¼
Karaya gum No. 1, NF, powd. bls. lb. .48 - —
No. 2, powd., bbls. ..... lb. .43 - —
No. 3, powd., bbls. ..... lb. .37 - —
Koch acid, bbls., frt. alld., 100% basis lb 1.00 - —
Kola nuts, bgs. ..... lb. .10 - —

L

L acid, bbls., works ..... lb. 1.25 - —
Lacquer diluent, petroleum, 150°-240° F b.r., tanks, west coast, ex tax, Los Angeles gal. .174 - —
150°-240° F. b.r., tanks, east coast, N. J., N. Y. gal. .20 - —
Lacquer diluent, benzene type, tanks, group 3 gal. .1550- —
Toluene type, tanks, group 3 gal. .14375- —
tanks, Houston, Tex. ..... gal. .16 - —
Lactic acid, edible, 50%, bbls. dms., c.l., frt. equald lb. .1789- .2740
bbls., dms., 20 or more, frt. equald lb. .1839- .2790
bbls., dms., 5 to 19, frt. equald. lb. .1889- .2840
bbls., dms., 1 to 4, frt. equald. lb. .1938- .2890
80%, c.l., bbls., dms., frt. equald lb. .3039- .4625
bbls., dms., 20 or more, frt. equald lb. .3089- .4675
bbls. dms 5 to 19 frt. equald. lb. .3139- .4725
bbls., dms., 1 to 4 frt. equald. lb. .3189- .4775
Lactic acid, plastic grade, 50%, c.l., bbls., works lb. .2740- —
bbls., 20 or more, works lb. .2790- —
bbls., 5 to 19, works ..... lb. .2840- —
bbls., 1 to 4, works ..... lb. .2890- —
80%, bbls., c.l., works ..... lb. .4625- —
bbls., 5 to 19, works ..... lb. .4725- —
bbls., 1 to 4, works ..... lb. .4775- —
Tech., 22%, bbls., c.l., works. 100 lbs. 6.80 - —
bbls., l.c.l., works ... 100 lbs. 7.20 - —
44%, bbls., c.l., works 100 lbs. 11.45 -12.70
bbls., l.c.l., works ..... 100 lbs. 11.85 -13.10
USP, 85%, cbys. ..... lb. .85 - —
Lactose, crystalline, edible, bgs., 23,000-lb. lots, frt. equald lb. .14 - —
bgs., 6,000-lb. lots, frt. equald lb. .14½- —
bgs., 2,000-lb. lots, frt. equald lb. .14¾- —
bgs., 200-lb. lots, frt. equald. lb. .15¼- —
Edible lactose in fib. dms., ½c. higher.
Lactose, ferment. grade, bgs., c.l., works lb. .08½- —
USP, fib. dms., 30,000-lb. lots, frt. equald lb. .21½- —
fib. dms., 2,000-lb. lots, frt. equald lb. .22¼- —
fib. dms., 200-1,800-lb. lots, frt. equald lb. .22¾- —
USP lactose in bags ½c. to 1c. lower.
Lactose, USP, spray dried, bgs., t.l., frt. equald lb. .18½- —
bgs., l.t.l., frt. equald .... lb. .19 - .19¼
Lady's slipper root, bls. ..... lb. 3.50 - 3.75
Lake C red toner, alizarine, bbls., works lb. 1.25 - —
Lamp black, bgs., c.l., works ..... lb. .16 - .45
Lanolin, cosmetic, dms., works ... lb. .27 - .29
USP, anhyd., dms., works ..... lb. .24 - .26
hydrous, dms., works ..... lb. .23 - .25
Lard, cash, dms. ..... lb. .0980- —
Lard oil (see Grease oil).
Larkspur seed, bgs. ..... lb. .35 - —
Laurel leaf oil, dms., cns. ..... lb. 9.75 -12.50
Laurent's acid, bbls. ..... lb. .60 - —
Lauric acid, pure, dms ..... lb. .38½- .41
tanks ..... lb. .36 - —
Lauryl alcohol, bots. ..... lb. 2.00 - 2.50
n-Lauryl methacrylate, dms., c.l., t.l. works lb. .65½- —
dms., l.t.l., works ..... lb. .66 - —
Lavandin oil, 22-24%, dms. ..... lb. 1.25 - 2.00
Abrial, dms. ..... lb. 1.00 - 1.50
Lavender flowers, medium, bls. lb. .55 - .60
Ord., bls. ..... lb. .20 - .25
Select., bls. ..... lb. .90 - 1.00
Lavender flower oil, USP, French, 35-37% ester, cns. lb. 3.25 - 9.25
40-42% ester, cns. ..... lb. 5.00 - 9.25
Spike, Spanish, cns. ..... lb. 2.20 - 3.00
Lead acetate, NF, cryst., gran., powd lb. .34½- —
White, cryst., bbls. ..... lb. .25½- —
gran., bbls. ..... lb. .26½- —
powd., bbls. ..... lb. .26½- —
Lead arsenate, acid powder, dealers, 3-50 lb. bgs or any quantity, frt. alld. on $150 or more. lb. .30½- —
1-lb. bgs., same basis ..... lb. .47 - —
Lead, blue, basic sulfate, bbls., c.l., shipt point, frt. alld. ... lb. .17 - —
bbls., l.c.l., same basis ..... lb. .18 - —
Lead carbonate (see Lead, white, basic carbonate).
Lead chloride, dms. ..... lb. .52 - —

ONE LABEL — *First Grade Only*
ONE PRICE — *That Saves You Money*
. . . and Perfect Performance for *Every* Purpose!

M. C. P.
Pure
Unadulterated
California
LEMON OIL
U.S.P.

An *Exclusively First Grade Lemon Oil* . . . Cold Pressed in California . . . and *Packed by the Producer* to Assure Highest Quality

For nearly 30 years, Mutual Citrus Products Co. has been cold-pressing California lemon oil for distribution by others. Now, M.C.P. LEMON OIL is being *prepared and packed* under the M.C.P. label. There is only *one* label and *one* quality — *the highest* — for M.C.P. LEMON OIL. Yet, M.C.P. LEMON OIL costs you *less* . . . while providing a product that is unsurpassed for flavor, purity, and dependability . . . for *every* purpose.

Produced and Packed by
MUTUAL CITRUS PRODUCTS COMPANY
Since 1928 Growers and Processors of Citrus Products

Distributed by

MUTUAL CITRUS PRODUCTS CO.
424 South Atchison Street, Anaheim, Calif.

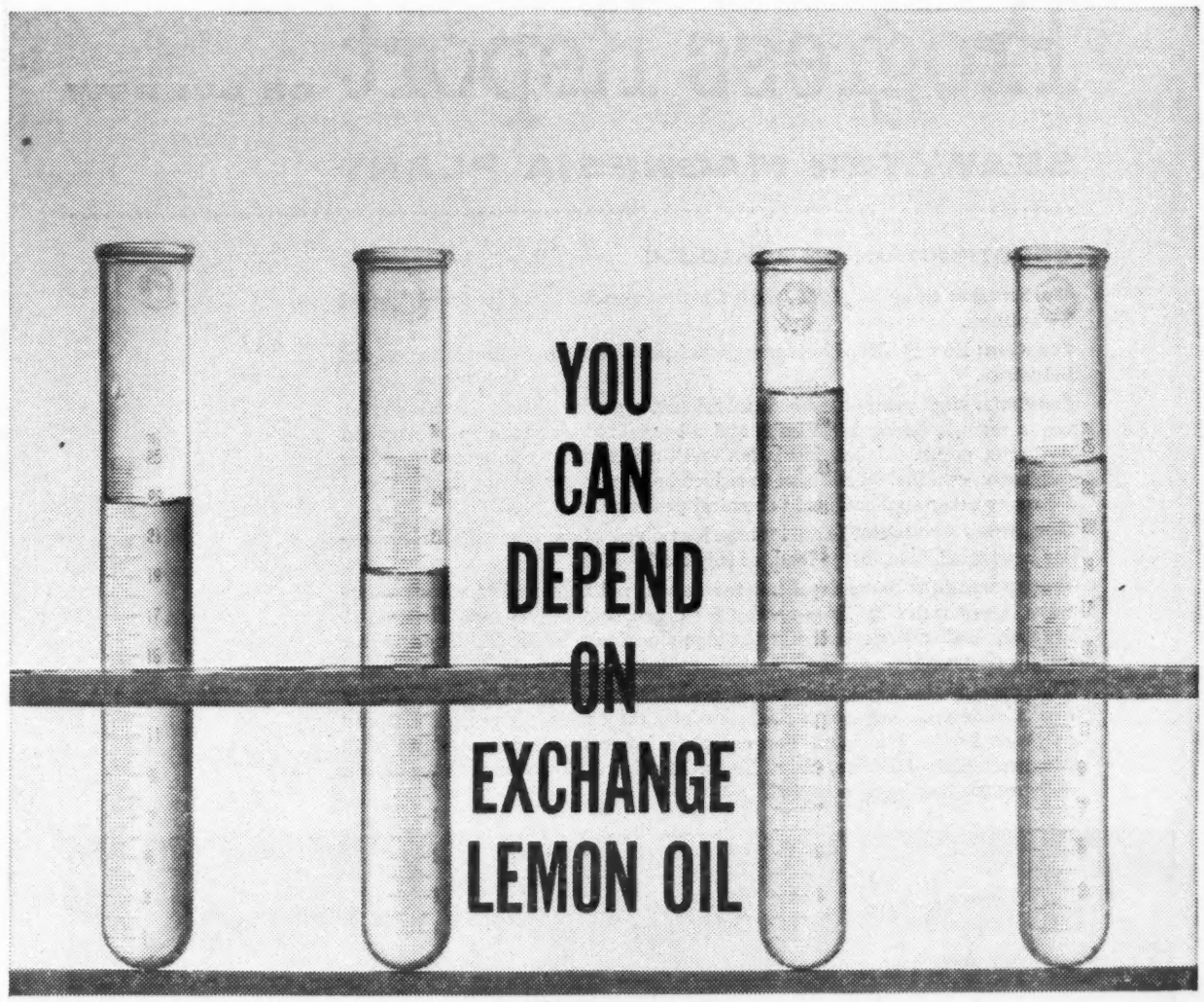
R. D. WEBB & CO., INC.
137 Eoston Post Road, Cos Cob, Conn.

Lead Iodide, NF V, jars ..... lb. 3.51 - —
Lead linoleate, fused, 26% Pb. dms. lb. .38 - —
Lead metal, prime, pigs, New York. lb. .12 - —
St. Louis ..... lb. .1180- —
Lead monosilicate, bgs., c.l., works, frt. equald ..lb. .143 - —
bgs., l.c.l., same basis ..... lb. .153 - —
Lead naphthenate, liq., 16% Pb, dms., dlvd ..lb. .19½- —
24% Pb, dms., dlvd. ..... lb. .24¼- —
Solid, 37% Pb, dms., dlvd. ...lb. .31¾- —
Lead nitrate, bbls. ..... lb. .24¼- .26¾
Lead orthosilicate-gel, 50-60% PbO, dms., works lb. .29¾- .34¼
Lead peroxide, tech. powd., bbls lb. .45 - .50
Lead phthalate, dibasic, dms., works. lb. .41 - —
Lead, red, 95% Pb_3O_4, or less bbls., c.l., works, frt. equald ..lb. .14¼- —
bbls., l.c.l., same basis ..... lb. .15¼- —
97% Pb_3O_4, bbls., c.l., same basis. lb. .1445- —
bbls., l.c.l., same basis ..... lb. .1545- —
98% Pb_3O_4, bbls., c.l., same basis. lb. .1460- —
bbls., l.c.l., same basis ..... lb. .1560- —
Lead resinate, precip. 23% Pb, dms., ton lots, dlvd. lb. .40¼- —
Lead salicylate, normal, dms., works. lb. .46 - —
Lead silicate (see Lead white basic silicate).
Lead silico-chromate, bgs., c.l., f.o.b. mfg. point, frt. alld. .lb. .19½- —
bgs., l.c.l., same basis ..... lb. .20½- —
Lead sulfate (see Lead blue basic sulfate).
Lead tallate, liq., 16% Pb, dms lb. .15 - —
24% Pb, dms. ..... lb. .21¼- —
Solid, 30% Pb, dms. ..... lb. .23¼- —
Lead, white, basic carbonate, bgs., c.l., shipt. pt., frt. alld. .lb. .17 - —
bgs., l.c.l., same basis ..... lb. .18 - —
Lead, white, basic silicate, bgs., c.l., shipt. pt. frt. alld. .lb. .15¾- —
bgs., l.c.l., same basis ..... lb. .16¾- —
Lead, white, basic sulfate, bgs., c.l., shipt. pt., frt. alld. .lb. .16¼- —
bgs., l.c.l., same basis ..... lb. .17¼- —
Lecithin, edible, tech., bleached, non-ret. dms., c.l., works. lb. .14 - .15
non-ret. dms., l.c.l., same basis lb. .15 - .16
unbleached, non-ret. dms., c.l., same basis lb. .13 - .14
non-ret. dms., l.c.l., same basis lb. .14 - .15

Lemon bioflavonoid complex, fib. dms., 25-lb. lots, works lb. 9.00 - —
Lemon oil, USP, Calif., cns., dms.lb. 3.25 - 4.00
Messina, cns. ..... lb. 4.50 - 9.50
Lemongrass oil, cns. dms. ..... lb. .95 - 1.25
dl-Leucine, dms., works ..... lb. 12.25 -15.00
Licorice root, gran., bls. ..... lb. .13 - —
Powd., bls. ..... lb. .15 - .16
Whole, bls. ..... lb. .09 - .10
Lignaloe wood oil, Mexican, cns lb. 2.75 - 3.50
Lignosulfonate (see under ammonium or sodium lignin sulfonate).
Lime, chemical (quicklime), bulk, c.l., 50,000 lbs., works, E. ton. 14.25 - —
Chemical, hydrated, bgs., c.l., same basis ton. 17.25 - —
Chemical, spray, bgs., c.l., same basis ton. 18.25 - —
For New York delivery, add $6.29 freight charge.
Lime oil, dist., Mexican, cns .... lb. 6.25 - 6.75
West Indian, cns. ..... lb. 6.50 - 7.80
Expressed, West Indian cns lb. 7.75 -13.70
Lime salts (see Calcium).
Lime-ammonium nitrogen, 20.5% N (see Ammonium nitrate with dolomite).
Linalool, ex bois de rose oil, dms.lb. 3.70 - 4.35
Syn., 98-100%, dms., works .. lb. 3.70 - —
Linalyl acetate, ex bois de rose, 90-92%, dms lb. 3.80 - 4.00
96-98%, dms. ..... lb. 4.10 - 4.80
Syn., 98-100%, dms., works .. lb. 3.70 - —
Lindane, 25% formulation, to distributors dms., frt. alld lb. 1.35 - 1.50
Lindane, tech., to formulators, dms., 1-2,000 lbs., dlvd lb. 2.40 - —
Linden flowers, with leaves, bls lb. .25 - —
Without leaves, bls. ..... lb. .35 - .40
Linseed meal, expeller, 32% bulk, Minneapolis, mills ton. Nominal
Extracted, 34% bulk, same basis. ton. 70.00 - —
Linseed oil, raw, dms., c.l., New York lb. .1600- —
dms., l.c.l., New York ..... lb. .17 - .1750
tanks, f.o.b. Minneapolis ... lb. .1250- —
tanks, New York ..... lb. .1400- —
tankwagon, New York ..... lb. .1450- .1460
Boiled linseed oil, .006c. per lb. higher.
Linseed oil acids, dist., dms .... lb. .1900- —
Water-white, dms ..... lb. .2200- —
Litharge, coml., powd., bbls., c.l., works, frt. equald ..lb. .13¾- —
bbls., l.c.l., same basis ..... lb. .14¾- —
Lithium aluminum hydride, lump, dms., works lb. 33.00 -39.00
Lithium benzoate, dms. ..... lb. 1.65 - 1.67
Lithium bromide, NF, gran., works. frt. equald lb. 2.60 - —
Lithium carbonate, NF, dms., c.l., t.l., dlvd lb. 1.29½- —
dms., ton lots to t.l., dlvd lb. 1.30 - 1.30½
Tech., dms., c.l., t.l., frt alld lb. .67 - —
dms., ton lots, same basis .. lb. .73 - —
dms., smaller lots, same basis. lb. .79 - —
Lithium chloride, CP, anhyd., dms., ton lots lb. 1.23½- —
Tech., anhyd., dms., c.l., t.l., dlvd. or works, frt. alld lb. .87 - —
dms., l.c.l., same basis . lb. .88 - .92
Lithium citrate, NF, dms., ton lots. lb. 1.50 - —
Lithium fluoride, dms., 20,000-lb. lots, dlvd lb 2.15 - —
bbls., ton lots and more, dlvd.lb 2.18½- —
bbls., less ton lots, dlvd. ..... lb. 2.23½- —
Lithium hydride, powd., dms., 500-lb. lots or more, works lb. 9.50 - —
Lithium hydroxide, monohydrate, dms., c.l., t.l., frt. alld lb. .72 - —
dms., l.c.l., frt. alld. ..... lb. .73 - —
Lithium manganite dms., works lb. .95 - 1.05
Lithium nitrate tech., dms., 100-lb. lots lb. 1.15 - 1.25
Lithium salicylate, dms. ..... lb. 1.60 - 1.70
Lithium silicate, dms., works lb. 1.10 - 1.20
Lithium stearate, dms., c.l., works. lb. .47½- —
dms., ton lots, works ..... lb. .48½- —
dms., less-ton lots, works ..... lb. .53½- —
Lithium sulfate, dms., 100-lb. lots. lb. 1.15 - 1.25
Lithium titanate, dms., works . lb. 1.15 - 1.25
Lithol red toner, barium, bbls., works lb. .98 - —
Lithol-rubine red toner, pure bbls., works lb. 1.50 - —
Resinated, bbls., works . lb. 1.47 - —
Lithopone, ord. bgs., c.l., dlvd. E. lb. .08¾- —
bgs., l.c.l., dlvd. E. ..... lb. .09½- —
Lithopone, titanated (high-strength), bgs., c.l., dlvd. lb. .11 - —
bgs., l.c.l., dlvd. ..... lb. .12 - —
Lobelia herb, bls. ..... lb. .55 - —
Lobeline sulfate, bots., 50-oz. lots, works .. oz. 30.00 - —
Locust bean gum, powd., bgs. .... lb. .38 - .39
Lycopodium, cs. ..... lb. 4.00 - 4.50
1-Lysine monohydrochloride, 25, 50-lb. dms. lb. 6.00 - —

M

Mace, Siauw, No. 1, bls. ..... lb. 1.85 - —
No. 2, whole, bls. ..... lb. 1.75 - —
siftings, bls. ..... lb. 1.70 - —
Mace oil, dist., cns., dms ..... lb. 9.75 -15.75
Magnesia, calcined, tech., bgs., ctns., frt. equald lb. .25¾- .26½
Tech., syn., rubber grade, light, bgs., c.l., frt. equald lb. .28¾- .30
rubber grade, extra light, bgs., c.l., frt. equald lb. .28 - —
bgs., l.c.l., frt. equald lb. .28¾- —
Above prices are quoted f.o.b. works, freight equald, with Metropolitan New York and competitive producing points.
Magnesia, calcined, USP, light bgs.lb. .36½- .37½
heavy, fib dms ..... lb. .45 - .52
Magnesite, chemical grade, calcined, powd., bgs., c.l., works. frt. equald ..ton. 86.25 - —
Magnesite, chemical grade, dead-burnt, standard grain, bulk, c.l., Chewelah, Wash ton. 46.00 - —
Magnesium bromide, cs., jars .. lb. .95 - 1.00
Magnesium carbonate, tech., bgs., c.l., frt. equald lb. .11 - —
bgs., t.l., frt. equald ..... lb. .11½- —
bgs., l.c.l., frt. equald ..... lb. .13½- .14
Magnesium carbonate, USP, bgs., c.l., frt. equald .lb. .13½- —
bgs., t.l., frt. equald ..... lb. .14 - —
bgs., l.c.l., frt. equald ..... lb. .15 - .16
Above prices are quoted f.o.b. works, freight equald, with Metropolitan New York and competitive producing points.
Magnesium chloride, anhyd., 92% flake or pebble, dms., c.l., works lb. .12¾- —
dms., l.c.l., works ..... lb. .14 - .15
Magnesium chloride, hydrous, 99% flake, bgs., c.l., works. ton. 55.00 - —
bgs., l.c.l., works ..... ton. 65.00 -80.00
Magnesium gluconate, 100-lb. dm., f.o.b. works E. lb. 1.42 - —
Magnesium hydroxide, NF, powd., dms., 500-lbs. or more, f.o.b., works lb. .24½- .25½
Magnesium lauryl sulfate, dms., c.l., frt. alld. .lb. .22½- —
dms., l.t.l., frt. alld ..... lb. .23½- —
tanks, frt. alld ..... lb. .21½- —
Magnesium metal, 99.8%, ingots, 10,000-lb. lots or more, works lb. .36 - —
pigs, 10,000-lb. lots or more, works lb. .35¼- —
sticks, cs. works frt. alld. on carlots lb. .59 - —
Magnesium nitrate, cryst., dms., works lb. .29 - —
Magnesium oxide (see Magnesia, calcined).
Magnesium phosphate tribasic, NF, bbls lb. 73 - —
Magnesium silicate (see Talc).
Magnesium silicofluoride, dms., works lb. .10½ .12
Magnesium sulfate, tech., bgs., c.l., works 100 lbs 2.15 - —
bgs., l.c.l., works. ..... 100 lbs 2.90 3.15
USP, cryst., bgs., c.l., works, 100 lbs 2.35 —
bgs, t.c.l., 5,000 lbs., 1 withdrawal 100 lbs. 3.10 - —
bgs, smaller lots ..... 100 lbs 3.35 - —
Magnesium trisilicate, USP, fib. dms., 5,000-lb. lots lb. .38 - —
fib dms., 1,000-lb lots .... lb. .40 - —
fib. dms., 100-lb. lots ..... lb. .45 - —
Bulky and super grades of magnesium trisicilate 7c. per lb. higher.
Malachite green, straight, PTMA, bbls, works lb. 5.30 - —
Malathion, dms., c.l., works .... lb. .89 - —
dms., l.c.l., works lb. .92 1.01
Maleic acid, cryst., powd., dms lb. .37¼ - —
Maleic anhydride, dms., c.l., dlvd. E. of Rockies lb. .28¾ - —
dms., l.c.l., dlvd. E. of Rockies lb 29¾ - —
tanks, dlvd E. of Rockies lb. .27¾ - —
Prices on maleic anhydride W of Rockies, 1½c. per lb higher
Malic acid, tech., dms. lb. .50 - —
Mandelic acid, NF, dms., 1,000-lb. lots lb 2.35 - —
dms., smaller lots ..... lb. 2.40 2.50



always pure
absolutely uniform
authentic U.S.P. oil

WHEN JUST AN OUNCE OR TWO of lemon oil can glorify—or ruin—a hundred-pound batch of your product, why gamble?

Use only Exchange Brand Lemon Oil, U.S.P., California Cold-pressed.

Made exclusively from their own California and Arizona lemons by the Sunkist Growers—the people who know citrus best—Exchange Lemon Oil is carefully cold-pressed, skillfully bulk-blended for matchless uniformity.

Sunkist Growers pack and seal every container—from the 7-pound tin to the 395-pound drum—in their own plant, and guarantee every drop to be pure U.S.P. quality oil—unadulterated, unsophisticated. Always look for the word "Exchange" on the tamper-proof container seal.

Exchange

Sunkist Growers

PRODUCTS SALES DEPARTMENT • ONTARIO, CALIFORNIA

Distributed in the U.S. by: Dodge & Olcott, Inc., 180 Varick Street, New York 14, N.Y. / Fritzsche Brothers, Inc., 76 Ninth Avenue, New York 11, N.Y. / Ungerer & Company, 161 Avenue of the Americas, New York 13, N.Y.

Mandrake Root—Methyl Roseaniline Chloride

Mandrake root, bls ..... lb. .45 - .48
Manganese acetate, dms. dlvd .. lb. .35 - —
Manganese borate tech., fib dms. lb. .23½- —
Manganese carbonate, chemical grade, 46% Mn, bgs., 20,000-lb lots and more, works lb. .11 - .16
Manganese chloride, CP, anhyd., dms., 20,000-lb lots, works lb. .21¾- —
smaller lots, works lb. .23½- —
Manganese dioxide, African, 83-87%, 40,000 to 99,999-lb. lots, burlap paper lined bgs., gross tor net works ton.148.00 - —
40,000 to 99,999-lb lots, paper bgs., same basis ton.144.50 - —
40,000 to 99,999-lb lots, dms. same basis ton.152.50 - —
Prices for manganese dioxide in 10,000 to 40,000-lb lots, $3 per ton higher.
Manganese gluconate, dms. lb. 1.84 - —
Manganese hydrate, dms., dlvd lb. .35 - —
Manganese hypophosphite, NF, dms. lb. 3.52 - —
Manganese linoleate, liq., 4.35% Mn, dms lb. .35¾- —
Solid, precip., 8.2% Mn, bbls lb. .41¼- —
Manganese metal, electrolytic, dms., c.l., dlvd. E. ..... lb. .34 - —
dms., ton lots, dlvd E. .... lb. .36 - —
dms., smaller lots, dlvd. E. lb. .38 - —
Manganese naphthenate, liq., 6% Mn, dms., frt. alld lb. .29¾- —
Manganese resinate, fused, 3½% Mn, dms lb. .25¼- —
Precip., 6½ 7% Mn dms .... lb. .33 - —
Manganese sulfate, fertilizer grade, 65% $MnSO_4$, bgs., c.l., dlvd S. E. ton.97.50 - —
bgs., l.c.l., dlvd. S. E. ton.104.50 - —
Manganese tallate, 6%, dms. .... lb. .26 - —
Manila copal gum, C, bgs. ..... lb. .35 - .39
DBB, bgs. ..... lb. .25 - .28
DK, bgs. ..... lb. No stocks.
DK, dust bgs. ..... lb. .14 Nom.
MA, soft, bgs. ..... lb. .20 .24
WS, bgs. ..... lb. No stocks.
Mannitol, com'l, fib dms., ton lots, works lb. .60 - —
fib. dms. to ton lots, works lb. .62 - —
fib. dms., single dm., works lb. .65 - —
Marine pitch, dms. ..... lb. .04¼- .05
MBTS (see Mercaptobenzothiazyl disulfide).
MBT (see 2-Mercaptobenzothiazole).
Melamine, bgs., c.l. works ..... lb. .30 - —
bgs., l.c.l., works ..... lb. .31 - —
Menadione, USP, bots. ..... gram. .044 .05
Menhaden oil, crude, tanks, works, Atl. & Gulf lb. .07½ Nom.
Menthol, nat., USP, Brazilian, cs. lb. 6.00 - —
Japanese, cs. ..... lb. 7.00 - 7.18
Syn., USP, racemic, cns ..... lb. 4.50 - —
2-Mercaptobenzothiazole, bgs., fib, dms., ton lots, works, frt, alld. lb. .44 - —
bgs., fib. dms. less ton lots, same basis lb. .46 - —
Mercaptobenzothiazyl disulfide, bgs., fib. dms., ton lots, works, frt. alld. lb. .54 - —
bgs., fib. dms., less ton lots, same basis lb. .56 - —
Mercuric chloride, NF, cryst., dms., 50-lb lots or more lb. 4.98 - —
USP, gran. or powd., 50-lb. dm., 100 lbs., f.o.b. works lb. 4.78 - —
Mercuric cyanide, NF VIII, powd., fib dms lb. 6.84 - —
Mercuric iodide red, NF, 100-lb. dm., f.o.b. works lb. 7.72 - —
Mercuric oxide, red., NF IX, 50-lb. dm., 100 lbs., f.o.b. works lb. 5.97 - —
tech., 50-lb. dm., 100 lbs., same basis lb. 5.77 - —
Mercuric oxide yellow, NF, 50-lb. dm., 100 lbs., same basis lb. 6.14 - —
tech., bbls., 1,000-lb. lots lb. 5.58 - —
bbls., smaller lots ..... lb. 5.60 - —
Mercurous chloride (see Calomel).
Mercurous iodide yellow, NF, 100-lb. dm., f.o.b. works lb. 8.22 - —
Mercury, ammoniated (see White precipitate, USP XV).
Mercury metal, 76 lbs. per flask, net-flask.245.00 -249.00
Mesityl oxide, dms., c.l., dlvd. lb. .15 - —
dms., l.c.l., dlvd. ..... lb. .16½- —
tanks, dlvd. ..... lb. .12½- —
Meta-aminophenol (see m-Aminophenol).
Metachloroaniline (see m-Chloroaniline).
Metanilic acid, dms., works .... lb. .57 - .75
Metanitroparatoluidine (see m-Nitro-toluidine).
Metanitroaniline (see m-Nitroaniline).
Metaphenylenediamine (see m-Phenylenediamine).
Metatoluidine (see m-Toluidine).
Metatolylenediamine (see 2,4-tolylenediamine).
Methacrylic acid, glacial, 98%, dms., truckloads, works lb. .47 - —
dms., smaller lots, works lb. .47½- .50
tanks, works ..... lb. .45 - —
Methanol, nat., denaturing grade, tanks, frt. alld. gal. .33 - —
Syn., zone 1, dms., c.l. or t.l. min., dlvd. gal. .31½- —
dms., l.c.l., dlvd ..... gal. .61½- —
tankwagon, 2,000-4,000 gal. lots, dlvd. Metropolitan area gal. .35 - —
tankwagon, 4,000 gal. min., dlvd gal. .30 - —
tankwagon, 4,000 gal. min., f.o.b. terminal gal. .29 - —
zone 2, dms., c.l., or t.l., min., frt. alld. or dlvd. gal. .55½- —
dms., l.c.l., works ..... gal. .65½- —
tankwagon, 2,000-4,000 gal. lots, min., dlvd., Metropolitan area gal. .39 - —
Methanol, syn., zone 2, tanks, 4,000 gal. min., dlvd gal. .30 - —

Synthetic methanol zones are: Zone 1 is all continental US E. of eastern boundaries of Ariz., Idaho and Utah, Zone 2 is remainder of US west of above state boundaries comprising Ariz., Calif., Idaho, Nev., Ore., Utah and Wash.

Methapyrilene fumarate, 100-999 lbs., dms., f.o.b. works, frt. equald lb.21.75 - —
Methapyrilene hydrochloride, 100-999 lbs., dms., f.o.b. works, frt. equald lb.27.25 - —
Methenamine (see Hexamethylenetetramine).
Methionine hydroxy analogue, (calcium salt) 90% min., dms., t.l., frt alld .... lb. 1.25 - —
dms., l.t.l., same basis ..... lb. 1.29 - —
dl-Methionine, fib. dms., frt. alld., 50-lb. or more lb. 3.50 - —
Feed grade, 98%, fib. dms., same basis lb. 1.55 - —
Methoxychlor, 50% wettable powder, dealers, dms., cs., frt. alld lb. .66 - .70
Methyl abietate, non-ret. dms., c.l., dlvd. zone 1 lb. .21½- —
non-ret. dms., l.c.l., same basis.lb. .22 - .22¼
Methyl abietate, hydrogenated, non-ret. dms., c.l., dlvd. zone 1 lb. .23½- —
non-ret. dms., l.c.l., same basis. lb. .24 - .24¼

Zone 1 includes New England and Middle Atlantic states, Va., W. Va., N. C., Ohio., Ky., Mich., Ind., Ill., Wis., St. Paul and Minneapolis, Minn.; St. Louis, Mo.; Miss., Ala., Ga., Fla., S. C. and Tenn.

Methyl acetone, nat., dms., l.c.l., E. of Miss., frt. alld. gal. .62½- —
Syn., dms., c.l., frt. alld. E. .. gal. .66 - —
dms., l.c.l., frt. alld. E. .... gal. .76 - —
tanks, frt. alld. E. ..... gal. .51 - —

Synthetic methyl acetone E. territory comprises all states East of and including Colo., Mont., N. Mex. and Wyo. West territory is made up of all states west of those four.

Methyl acrylate, dms., c.l., t.l., dlvd. lb. .39 - —
dms., l.t.l., dlvd. ..... lb. .40 - —
tanks, dlvd. ..... lb. .37 - —
Methyl alcohol (see Methanol).
Methyl amyl acetate, dms., c.l., dlvd. E lb. .17 - —
dms., l.c.l., dlvd. E. ..... lb. .18½- —
tanks, dlvd. E. ..... lb. .14½- —
Methylamyl alcohol, dms., c.l., dlvd. lb. .17 - —
dms., l.c.l., dlvd. ..... lb. .18½- —
tanks, dlvd. ..... lb. .14½- —
Methylamyl ketone, dms., works.lb. 1.05 - —
N-Methylaniline, tech., tanks, frt. alld. lb. .68 - —
Methyl anthranilate, cns. ..... lb. 2.25 - 2.75
Methyl benzoate, cns., dms. ..... lb. .65 - .75
Methyl bromide, service organization prices, 40 to 375-lb. cyls., large lots, frt. allo lb. .62 - .65
Methyl cellulose, special vis., (1,500-4,000 cps.) 50-lb. bgs., c.l., works lb. .82 - —
Methyl cellulose, special vis., (1,500-4,000 cps.), 50-lb. bgs., 2,000-lb. lots and more, same basis lb. .89 - —
50-lb. bgs., smaller lots, frt. alld. on 100 lbs lb. 1.05 - —
Methyl cellulose, standard vis. (15,-400 cps.), 50-lb. bgs., c.l., frt. alld lb. .69 - —
50-lb. bgs., 2,000-lb. lots and more, same basis ..... lb. .76 - —
50-lb. bgs., smaller lots, frt. alld. on 100-lbs lb. .79 - .89
Methyl chloride, inoust., cyls., frt. equald lb. .22¼- —
tanks, multi-unit, same basis. lb. .16¼- —
tanks, single unit, same basis. lb. .12¾- —
Refrigerator mfrs., cyls., dlvd lb. .48¾- —
other consumers or service men, cyls., dlvd lb. .67¾- —
Methyl chloroform (see 1,1,1-Trichloroethane).
Methyl cinnamate, cns. ..... lb. 1.55 - 1.80
Methyl ethyl ketone, dms., c.l., dlvd lb. .15 - —
dms., l.c.l., dlvd. ..... lb. .16½- —
tanks, dlvd. ..... lb. .12½- —
2-Methyl-5-ethyl pyridine, dms., c.l., works lb. .45 - —
dms., l.c.l., works ..... lb. .45¾- —
tanks, works ..... lb. .43 - —
Methyl formate, refd., dms. .... lb. .35 - .40
Tech., non-ret. dms., any quantity, works lb. .10 - —
tanks, works ..... lb. .07 - —
a-D Methyl glucoside, tech., 100-lb. multiwall paper bgs., c.l., works lb. .21 - —
100-lb. multiwall paper bgs., t.l., min. 23,000 lbs., works lb. .21½- —
100-lb. multiwall paper bgs., l.t.l., works ..... lb. .23 - —
Methyl heptin carbonate, bots lb.28.00 -31.00
Methyl p-hydroxybenzoate, fib. dms. lb. 1.90 - 2.00
Methyl ionone, standard, cns., dms. lb. 3.40 - 3.85
Methyl isobutyl carbinol (see Methyl amyl alcohol).
Methyl isobutyl ketone, dms., c.l., dlvd lb. .17 - —
dms., l.c.l., dlvd. ..... lb. .18½- —
tanks, dlvd. ..... lb. .14½- —
Methyl methacrylate, dms., c.l., t.l., frt. equald, with Belle, W Va. lb. .31 - —
dms., smaller lots, same basis lb. .31½- —
tanks, same basis ..... lb. .29 - —
Methyl naphthyl ketone, cryst., cns. lb. 2.45 - 4.30
Methyl parahydroxybenzoate (see Methyl p-Hydroxybenzoate).
Methyl parathion tech., 80%, dms., frt. alld E lb. .84 - —

Methyl parathion prices 2c. per lb. higher in West.

Methyl roseaniline chloride, NF., 5-lb. fib. dms. lb. 6.90 - —

Progress Report on our new

SEAWATER MAGNESIA PLANT

CONSTRUCTION ON SCHEDULE

On Stream: Summer, 1959, with finished products ready for shipment by autumn.

Location: Port St. Joe, Florida. Adjacent plant sites are available for related industries.

Products: High-purity chemical and refractory grades of magnesium oxide for use in manufacturing basic brick and other refractory products, rubber and neoprene, paper, textiles, insulation and building products, ceramics, water treatment, as a fuel oil additive to reduce boiler scale, catalysts, fertilizer, and for many other applications in chemical processes.

Quantities Available: Large tonnage is available at economical price levels — car load, truck load, barge load, or ship load.

Transportation: Barge shipments to receiving points on mid-continent waterways. Deep water facilities nearby for ocean shipping to both coasts and abroad. Rail connections via the Appalachicola Railroad. Good motor freight connections.

The new seawater MgO plant will enable Michigan Chemical to serve industry over a wide area, augmenting substantially the company's present capacity at Saint Louis, Michigan. For complete information, communicate with Magnesia Sales Division, Saint Louis, Michigan. Commitments for future delivery are now being accepted.

MICHIGAN CHEMICAL CORPORATION

644 North Bankson Street, Saint Louis, Michigan

EASTERN SALES OFFICE: 230 Park Avenue, New York 17, N. Y.

M-59-2

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Methyl salicylate, dms., t.l., frt. alld.	lb.	.80¼-	—
dms., l.c.l., same basis	lb.	.62½-	.67¼
Methyl testosterone, USP, 100-gram bots.	gram.	No Prices.	
Methyl violet toner, molybdated, PMA, bbls., dlvd. E. of Rockies	lb.	2.80	—
Methyl violet toner, tungstated, PTMA, bbls., same basis	lb.	4.35	—
Methyl violet prices 1c. higher W. of Rockies.			
Methylene blue, fib. dms., 100-lb. lots, frt. adjusted	lb.	3.23	—
Methylene chloride, tech., straight or assorted, dms., c.l., or t.l., dlvd.	lb.	.14	—
dms., l.c.l., t.l., dlvd.	lb.	.16¾-	—
tanks, 4,000-gal. min., tank trucks, maximum load limit, dlvd	lb.	.12½-	—
tanktrucks, 1,000-gal. min., dlvd.	lb.	.13½-	—
b-Methylnaphthalene, 32°C., m.p., dms., works	lb.	.90	—
Methylpentanediol (see Hexylene glycol).			
Methylphenylpyrazolone (see 1-phenyl-3-methylpyrazolone-5).			
Methylthionine chloride (see Methylene blue).			
Mica, dry-grd., paint, plastic, 100 mesh, bgs. c.l., works	lb.	.04	—
roofing, 20 to 80 mesh, works	lb.	.03	—
Mica, wet-grd., biotite, bgs., c.l., works, frt. alld. E	lb.	.06½-	—
bgs., l.c.l. ex-whse.	lb.	.07¼-	—
paint or lacq., bgs., c.l., 325 mesh, works frt. alld. E.	lb.	.08¼-	—
bgs., l.c.l., ex-whse. or freight alld. E	lb.	.09	—
rubber, bgs., c.l., works, frt. alld. E	lb.	.08	—
bgs., l.c.l., ex-whse. or frt. alld. E	lb.	.08¾-	—
wallpaper bgs. c.l. works, frt. alld. E	lb.	.08¾-	—
bgs. ex-whse. or frt. alld. E.	lb.	.09	—
white, 5-10 microns, bgs., c.l., works, frt. alld. E	lb.	.08¼-	—
l.c.l., ex-whse., or frt. alld. E.	lb.	.09	—
Mica, wet-grd. W. of Miss. ½c. higher; W. of Rockies 1c. higher.			
Microcrystalline wax, petroleum, coating grades, tankcars, works	lb.	.10	.11
Microcrystalline wax, petroleum, laminating grades, tankcars, works	lb.	.11	.12
Mineral black, bgs., works	lb.	.0160-	.0673
Mineral oil, white, tech., 50-65 vis., non-ret. dms., c.l., f.o.b. refy	gal.	.62	—
non-ret. dms., l.c.l., same basis	gal.	.67	—
tankcars, refy.	gal.	.46	—
65-75 vis., non-ret. dms., c.l., same basis	gal.	.62	—
tankcars, refy.	gal.	.46	—
80-90 vis., non-ret. dms., c.l., same basis	gal.	.63	—
non-ret. dms., l.c.l., same basis	gal.	.68	—
tankcars, refy.	gal.	.47	—
135-138 vis., non-ret. dms., c.l., same basis	gal.	.69	—
non-ret. dms., l.c.l., same basis	gal.	.74	—
tankcars, refy.	gal.	.53	—
145-155 vis., non-ret. dms., c.l., same basis	gal.	.75	—
non-ret. dms., l.c.l., same basis	gal.	.80	—
tankcars, refy.	gal.	.59	—
USP, 180-190 vis., non-ret. dms., c.l., same basis	gal.	.77	—
non-ret. dms., l.c.l., same basis	gal.	.82	—
tankcars, refy.	gal.	.61	—
200-210 vis., non-ret. dms., c.l., 200-210 vis., non-ret. dms., l.c.l., same basis	gal.	.89	—
tankcars, refy.	gal.	.63	—
300-350 vis., non-ret. dms., c.l., f.o.b. New York	gal.	.84½-	—
non-ret. dms., l.c.l., same basis	gal.	.89½-	—
tankcars, refy.	gal.	.68½-	—
Mineral orange, American, bbls., c.l., works	lb.	.1560-	—
bbls., l.c.l., same basis	lb.	.1660-	—
Mineral spirits, petroleum, odorless, tanks, refy Watson, Calif.	gal.	.25	—
tanks, Borger, Tex.	gal.	.25	—
Houston, Tex.	gal.	.25	—
Philadelphia	gal.	.32	—
Newark	gal.	.29	—
New York, dlvd.	gal.	.30½-	—
Wood River, Ill.	gal.	.2725-	—
tankwagon, New Jersey, dlvd.	gal.	.37½-	—
tankwagon, New York, dlvd.	gal.	.38½-	—
Mineral spirits, petroleum, regular, tanks, Calif., ex tax San Francisco	gal.	.169	—
tanks, east coast, New Jersey,, New York	gal.	.18	—
tanks, group 3	gal.	.12875-	—
tanks, Houston, Tex.	gal.	.145	—
tankwagon, Boston	gal.	.20	—
Buffalo	gal.	.20½-	—
Chicago	gal.	.289	—
Cleveland	gal.	.23½-	—
Newark	gal.	.19	—
New York	gal.	.19	—
Philadelphia	gal.	.19½-	—
Pittsburgh	gal.	.19	—
Providence	gal.	.20½-	—
Mirbane oil (see Nitrobenzene)			
MNPT maroon toner, kgs., c.l., works	lb.	6.30	—
Molasses, blackstrap, feed grade, tanks, New Orleans	gal.	.12	.12¼
tanks, New York	ga'	.16	—
Molybdated orange, bbls.	lb.	.28	—
Molybdenum metal, powd., 80 or 200 mesh, ctns., works	kilo.	7.84	—
325 mesh, ctns., works	kilo.	9.13	—
Molybdenum trioxide, purif., dms., works	lb.	1.15	—
Tech., chemical, dms., works, basis Mo. content	lb.	1.48	—
Tech., metallurgical, dms., works, basis Mo. content	lb.	1.47	—
Molybdic acid, 85%, dms., works.	lb.	1.05	1.15
Monoallylamine, dms., c.l., dlvd	lb.	.965	—
dms., c.l., dlvd.	lb.	.995	—
tanks, dlvd.	lb.	.96	—
Monobutylamine, dms., c.l., dlvd. E. of Rockies	lb.	.57½-	—
dms., l.c.l., same basis	lb.	.59	—
tanks, same basis	lb.	.55	—
Mono-tert-butyl-m-cresol, dms., c.l., works	lb.	.55	—
dms., l.c.l., works	lb.	.56	—
tanks, works	lb.	.54	—
Monochloracetic acid, purif. (see Chloroacetic acid, mono)			
Monochlorobenzene, dms., c.l., frt. alld or dlvd. E	lb.	.10½-	—
dms., l.c.l., same basis	lb	.11½-	—
tanks, same basis	lb.	.08¾-	—
Monoethanolamine, dms., c.l., dlvd. E	lb.	.37½-	—
dms., l.c.l., same basis	lb.	.28½-	—
tanks, same basis	lb.	.25	—
Monoethylalphanaphthylamine (see N-Ethyl-a-naphthylamine).			
Monoethylamine, 70% aqueous, solution, dms., c.l., dlvd. E. 100% basis	lb.	.38½-	—
dms., l.c.l., dlvd. E., 100% basis.	lb.	.40	—
tanks, dlvd. E., 100% basis	lb.	.35	—
Monoethylaniline (see N-Ethylaniline).			
Monoethylorthotoluidine (see N-Ethyl-o-toluidine).			
Monoisopropanolamine, dms., c.l., dlvd E	lb.	.27½-	—
dms., l.c.l., same basis	lb.	.29	—
tanks, same basis	lb.	.25	—
Monoisopropylamine, anhyd., dms., c.l., dlvd	lb.	.33½-	—
dms., l.c.l., same basis	lb.	.35	—
tanks, same basis	lb.	.31	—
Monomethylamine, anhyd., cyls., l.c.l., frt. equald., 100% basis	lb.	.30	—
tanks, same basis	lb.	.26	—
30-35% soln., dms., c.l., frt. equald., 100% basis	lb.	.36	—
dms., l.c.l., frt. equald., 100% basis	lb.	.36½-	—
tanks, frt. equald., 100% basis.	lb.	.26	—
40% soln., dms., frt. equald, 100% basis	lb.	.33	—
dms., l.c.l., frt. equald., 100% basis	lb.	.33½-	—
tanks, frt. equald., 100% basis.	lb.	.26	—
Monopentaerythritol, tech., bgs., c.l., dlvd. E	lb.	.31	—
bgs., l.c.l., dlvd. E	lb.	.32	—
Monopotassium glutamate, dms., 1,000-lb. lots, frt. alld	lb.	3.03	—
dms, 100-lb lots, same basis	lb.	3.25	—
Monosodium glutamate, dms., any quantity, dlvd	lb.	1.00	—
Monosodium phosphate (see sodium phosphate, monobasic).			
Mono-tertiary-butylmetacresol (see 6-tert-butyl-m-cresol).			
Montan wax, dom., refd., bgs.	lb.	.29	.30
Imp., crude, Bohemian, bgs.	lb.	.22	.24
German, bgs.	lb.	.26	.27
Morphine, ens.	oz.	12.40	12.60
Morphine acetate, anhyd., cns.	oz.	9.95	10.00
Morphine hydrobromide, cns.	oz.	9.90	9.95
Morphine hydrochloride, NF, cns	oz.	9.90	9.95
Morphine sulfate, USP, cns.	oz.	9.90	10.05
Morpholine, dms., c.l., dlvd. E	lb.	.55¼-	—
dms., l.c.l., dlvd. E.	lb.	.56¼-	—
tanks, dlvd. E.	lb.	.52¾-	—
Muriatic acid (see Hydrochloric acid).			
Musk, syn., ambrette, fib. dms., 100-lb. lots	lb.	4.40	4.90
cns., 25-lb. lots	lb.	4.50	5.00
Ketone, fib. dms., 100-lb. lots	lb.	4.60	5.10
cns., 25-lb. lots	lb.	4.70	5.20
Xylol, fib. dms., 100-lb lots	lb.	1.40	—
cns., 25-lb lots	lb.	1.45	—
Mustard seed, Danish, yellow, bags.	lb.	.11½-	—
Montana, yellows, bgs.	lb.	.10½-	—
Oriental, bgs.	lb.	.08	—
Mustard oil, syn. bots.	lb.	1.60	1.85
Myristic acid, bgs.	lb.	.31½-	.34
tanks	lb.	.30½-	—
Myrrh gum, cs.	lb.	.55	—

N

Naphtha, high solvency (see Solvent naphtha, petroleum).			
Naphtha, petroleum, cleaner's (see Cleaner's naphtha).			
Naphtha, VM&P, petroleum 225°-300°F., b.r., tanks, west coast, Los Angeles	gal.	.174	—
Portland, Ore.	gal.	.18	—
San Francisco	gal.	.179	—
Seattle, Wash.	gal.	.18	—
east coast, New Jersey and New York	gal.	.19	—
group 3	gal.	13875	—
Naphtha, VM&P, petroleum, tankwagon, Boston	gal.	.21½-	—
Chicago	gal.	.299	—
Cleveland	gal.	.24½-	—
Houston Tex.	gal.	.15½-	—
Newark	gal.	.20½-	—
New York	gal.	.20½-	—
Philadelphia	gal.	.21½-	—
Pittsburgh	gal.	.20	—
Naphthalene crude, com., 74°, tanks, frt. equald	lb.	.04¼-	—
78° tanks, same basis	lb.	.05	—
Imp., 78°, bgs., large lots	lb.	.05½	Nom.
Naphthalene refd. indust., chipped, crushed, bgs., frt. equald.	lb.	.12½	—
tanks, same basis	lb.	.09¾-	—
Refd., indust., balls, flakes, wholesalers, jobbers, bbls., c.l., same basis	lb.	.15½-	—

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• FOOD LOCKER PAPER • BATTERIES
RANSFORMERS • WIRE and
ULATION • GREASE and LUBRICANTS
RINTING INKS • RUST PREVENTIVES • CHEESE COATINGS • INVESTMENT CASTINGS
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AP-59-6

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CHICAGO, ILLINOIS, 332 So. Michigan Ave.
ARDMORE, PENNSYLVANIA, 119 Coulter Ave.

WESTERN SALES AGENTS:
SAN FRANCISCO, CALIFORNIA,
Gilbreath Chemical Co., 383 Brannan Street
SANTA MONICA, CALIFORNIA,
Gilbreath Chemical Co., P. O. Box 549

Naphthalene, refd., balls, flakes, wholesalers, jobbers, cs., 50 lbs., c.l., same basis. lb. .15¾- —
1-lb. pkgs., c.l., same basis. lb. .18½- —
a-Naphthol, bbls., frt. alld. lb. 1.00 • —
b-Naphthol, tech., flake, bbls., c.l., works lb. .33 • —
bbls., l.c.l., works lb. .35 • —
Naphthol, ITR, red toner, bbls., works lb. 5.50 • —
1-Naphthol-3,6-disulfonic 8-amino acid (see H acid).
1-Naphthol-4 sulfonic acid (see Nevile and Winther's acid).
1-Naphthol-5-sulfonic acid (see L acid).
1-Naphthol-5-sulfonic 8-amino acid (see S acid).
2-Naphthol-6,8-disulfonic acid (see Gamma acid).
Naphthol sulfonic mixed acid (see Cleve's acid).
a-Naphthylamine, bbls., frt. alld lb. .50 • —
b-Naphthylamine, tech., flake, bbls., works lb. 1.60 • —
1-Naphthylamine-5-sulfonic acid (see Laurent's acid).
2-Naphthylamine-4,8-disulfonic acid (see Cassella acid).
2-Naphthylamine-1-sulfonic acid (see Tobias acid).
2-Naphthylamine-6-sulfonic acid (see Broenner's acid).
2-Naphthylamine-7-sulfonic acid (see F acid).
Naringin, fib. dms. lb. 8.50 • —
Neatsfoot oil, 15° cold test, dms. lb. .30 • .33
20° cold test, dms. lb. .29 • .32
30° cold test, dms. lb. .28 • .31
Neocinchophen, USP, dms., frt. adjusted lb. 7.00 • 8.00
Neomycin sulfate, fib. dms., 1-kilo basis activity gram. .25 • —
fib. dms., 100-999-gram lots, basis activity gram. .30 • —
Neroli oil, NF, French, bots. lb. 425.00 -575.00
Tunisian, bots. lb. 400.00 • —
Nerolin, cns. lb. 2.55 • 2.85
Nevile and Winther's acid, dms., frt. alld. lb. 1.30 • —
Niacinamide (see Nicotinamide).
Nickel acetate, bbls., dlvd. lb. .68½- .75½
Nickel carbonate, bbls., dlvd. lb. .78¼- .85¼
Nickel chloride, bbls., dlvd. lb. .37 • .45
Nickel formate, bbls., ton lots, frt. alld. lb. .72 • .73
Nickel metal, electro cathodes, cs., works lb. .74 • —
Nickel nitrate, bbls., works lb. .32½- .33½
Nickel oxide, black, bbls. lb. .85 • —
Green, bbls. lb. .84 • —
Nickel sulfate, bgs., c.l., dlvd. lb. .28 • —
bgs., l.c.l., dlvd. lb. .28½- .36
Nicotinamide, USP, 50-kilo dm., frt. adjusted kilo. 9.50 • —
Nicotinamide hydrochloride, dms., frt. adjusted kilo. 9.50 • 9.80
Nicotine sulfate, 40%, dealers, 50-lb. dms. frt. alld. lb. 1.20 • —
40%, manufacturers, 500-lb. dms., frt. alld. lb. 1.05 • —
Nicotinic acid, USP, dms., dlvd. kilo. 6.00 • —
Nicotinic amide, USP (see Nicotinamide).
Niger seed, bgs. lb. .10¼- —
Nikethamide, cbys. lb. 5.00 • —
Nitric acid, 36° Be., cbys., c.l., works E. 100 lbs. 5.75 • —
cbys., l.c.l., works E 100 lbs. 6.05 • 6.85
38° Be., cbys., c.l., works, E. 100 lbs. 6.25 • —
cbys., l.c.l., works E. 100 lbs. 6.55 • 7.35
40° Be., cbys., c.l., works, E. 100 lbs. 6.75 • —
cbys., l.c.l., works, E. 100 lbs. 7.05 • 7.85
42° Be., cbys., c.l., works, E. 100 lbs. 7.25 • —
cbys., l.c.l., works, E. 100 lbs. 7.55 • 8.35
Nitric acid, 58.5 to 68% HNO_3, tanks, works, 100% basis 100 lbs. 3.90 • —
94½ to 95½% HNO_3, tanks, works, 100% basis 100 lbs. 4.90 • —
Nitric acid, CP, NF, consumer, cbys., extra, c.l., works lb. .18½- —
cbys. extra, l.c.l., works. lb. .20 • —
5-pint bots., extra, cs., c.l., same basis lb. .22½- —
5-pint bots., extra, cs., l.c.l., same basis lb. .24 • .25
4-Nitro-2-aminophenol, tech., paste, dms., frt. alld. lb. .99 • —
m-Nitroaniline, cryst., dms., frt. alld lb. 1.15 • —
Paste, dms., frt. alld., 100% basis. lb. 1.10 • —
e-Nitroaniline, flaked, dms., t.l., frt. alld. lb. .49 • —
dms., l.t.l., frt. alld. lb. .51 • —
e-Nitroaniline orange toner, kegs, lb. 1.35 • —
p-Nitroaniline, dms., frt. alld. lb. .445 • —
o-Nitroanisole, tech., tanks, frt. alld. lb. .36 • —
p-Nitroanisole, tech., solid, dms., frt. alld. lb. .72 • —
Nitrobenzene, dbl. dist., dms., c.l., frt. alld. lb. .13 • —
dms., l.c.l., frt. alld. lb. .14 • —
tanks, frt. alld. lb. .11 • —
p-Nitrobenzoic acid, dms., c.l., works lb. .63 • —
dms., l.c.l., works lb. .64 • —
Nitrocellulose, ester-soluble, 30-33 cps., ¼, ½, ¾, 5-6, 15-20, 30-40, 60-80, 125-175 seconds, bbls., c.l., works lb. .37½- —
bbls., l.c.l., same basis lb. .33½- .40¼
Nitrocellulose, ester-soluble, 18-20 cps., bbls., c.l., same basis lb. .39½- —
bbls., l.c.l., same basis lb. .40½- .42¼
Ester-soluble, 250-400, 600-1,000 seconds, bbls., l.c.l., same basis lb. .43 • .46
Nitrocellulose, spirit soluble, 30-35 cps., ¼, ½ seconds, bbls., c.l., same basis lb. .43 • —
bbls., l.c.l., same basis lb. .44 • .46
Spirit soluble, 5-6 cps., 40-60 seconds, bbls., c.l., same basis lb. .42 • —
bbls., l.c.l., same basis lb. .43 • .45
Denatured alcohol used in the manufacture of nitrocellulose is charged extra. Drums extra but returnable.
e-Nitrochlorobenzene, dms., c.l., frt. alld. lb. .15 • —
dms., l.c.l., same basis lb. .16 • —
tanks, same basis lb. .13 • —
p-Nitrochlorobenzene, dms. lb. .26 • .27
2-Nitro-p-cresol, tech., dms., dlvd. lb. .88 • —
Nitroethane, dms., c.l., dlvd. E lb. .25 • —
dms., l.c.l., dlvd E. lb. .26½- —
tanks, dlvd. E. lb. .22½- —
Nitroethane prices West of Rockies are 1c. higher.
Nitrogen solutions, tanks, frt. equald., N. unit. 1.20 • —
Nitrogenous process tankage, bulk, works unit-ton. 4.00 Nom.
Nitrogenous sewage sludge, bulk, f.o.b. Chicago, works unit-ton. 3.10 • .50
Nitromethane, dms., t.l., dlvd. E lb. .25 • —
dms., l.t.l., dlvd E. lb. .26½- —
Nitromethane prices West of Rockies are 1c. higher.
a-Nitronaphthalene, bbls., frt. alld. lb. .31 • —
o-Nitrophenol, dms., works, frt. equald lb. .94 • —
p-Nitrophenol, dms., c.l., frt. alld. lb. .45 • —
dms., l.c.l., frt. alld. lb. .47 • —
1-Nitropropane, dms., c.l., frt. alld. E. of Rockies lb. .23½- —
dms., l.c.l., same basis lb. .25 • —
tanks, same basis lb. .21 • —
2-Nitropropane, dms., c.l., frt. alld. E. of Rockies lb. .18½- —
dms., l.c.l., same basis lb. .20 • —
tanks, same basis lb. .16 • —
Nitropropane prices West of Rockies are 1c. per lb. higher.
m-Nitrotoluene, tech., dms., frt. alld. lb. .45 • —
o-Nitrotoluene, dms., c.l., frt. alld. lb. .15 • —
dms., l.c.l., frt. alld. lb. .16 • —
tanks, frt. alld. lb. .13 • —
p-Nitrotoluene, tech., cast, tanks, works lb. .26½- —
c.l., t.l., dms., same basis lb. .27½- —
l.c.l., dms., same basis lb. .28 • —
p-Nitrotoluene, tech., flake, c.l., t.l., works lb. .27¼- —
l.c.l., dms., same basis lb. .28 • —
m-Nitro-p-toluidine, dms. lb. 1.25 • —
Nonylphenol, dms., c.l., frt. alld. lb. .22 • —
dms., l.c.l., frt. alld. lb. .23 • —
tanks, frt. alld. lb. .19½- —
Nonylphenol prices on shipments to Western States are 2c. higher.
Nutmegs, East Indian, whole, bgs. lb. 1.40 • —
West Indian, bgs. lb. 1.55 • —
Nutmeg oil, USP, dist., East Indian, cns. lb. 9.50 -15.75
West Indian, cns. lb. 9.50 -15.75
Nux vomica, bls. lb. .12 • —
Powd., bbls., bxs. lb. .18 • —

O

Ocher (see Iron oxide yellow, nat.).
Ocotea cymbarum, oil, dms. lb. .41 • .65
Octane, indust., tanks, Bayonne, N.J. gal. .20 • —
Borger, Tex. gal. .15¾- —
1-Octanol, tech., dms., c.l., dlvd., Zone 1 lb. .41½- —
dms., l.c.l., dlvd., Zone 1 lb. .43½- —
tanks, dlvd., Zone 1 lb. .39 • —
Octyl alcohol, perfumers' grade, bots lb. 1.60 • 3.25
Octyl alcohol, tech. (see 1-Octanol, tech).
Octyl phenol, bgs., c.l., works lb. .22 • —
bgs., l.c.l., works lb. .22½- —
tanks, works lb. .21 • —
Octyl phenol in dms., 11c. higher.

Oils

Oil quotations are listed individually. For example, prices on Oil, coconut, may be found in the C's under Coconut oil.

Oiticica oil, liq., dms. lb. .22 • .22½
tanks lb. .20½- —
Oleic acid, dbl.-dist. (white), dms. lb. .18½- .21
tanks lb. .16 • —
Single-dist., dms. lb. .17¼- .19¾
tanks lb. .14¾- —
Oleo oil, extra, dms. lb. .14¾- .15
Oleostearine, dms. lb. .13¾- .14
Oleum (see Sulfuric acid, fuming).
Olibanum gum, siftings, cs. lb. .13 • .20
Tears, cs. lb. .22 • .30
Olibanum oil, bots. lb. 5.00 • 7.65
Extra fine, bots lb. 8.00 • 9.50
Olive oil, edible, dms., spot, duty-paid gal. 2.35 • 2.45
Olivine, crude, works ton. 12.00 • —
20 mesh, works ton. 15.00 • —
100 mesh, works ton. 20.00 • —
Opium, USP, cns. oz. 19.20 -19.45
gran., cns. oz. 21.65 -21.90
powd., cns. oz. 21.65 -21.90

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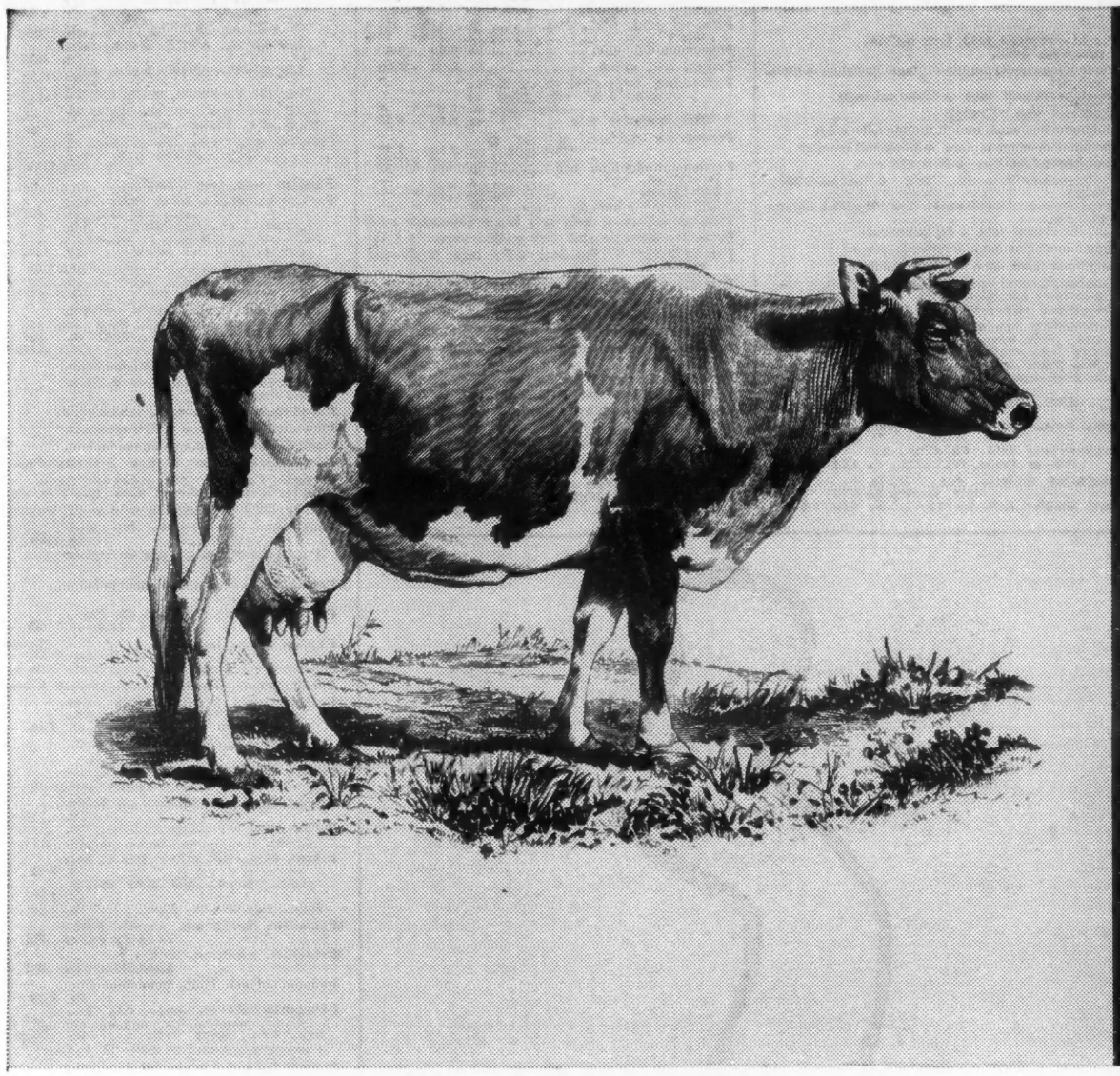

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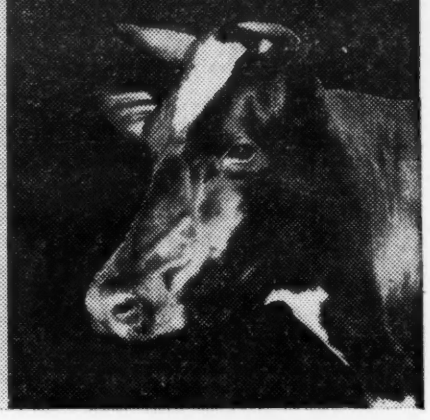

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ANSWER

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Orange Oil—p-Phenetidine

Orange oil, expressed USP, Brazilian, cns., dms	lb.	No stocks.	
California, cns dms.	lb.	1.25	1.50
Florida, cns., dms	lb.	.95	1.25
Messina, cns.	lb.	3.25	5.00
West Indian, bitter cns., dms.	lb.	3.25	3.85
Sweet, dist., cns., dms.	lb.	.70	—
Orange peel, bitter, Haitian, bls.	lb.	.18	.20
Sweet	lb.	.35	.38

Orange Pigments

Orange pigment quotations are listed individually. For example, prices on Orange, chrome, may be found in the C's under Chrome orange.

Origanum oil, Spanish, cns	lb	1.80	2.30
Orris root, Florentine, bls.	lb.	.55	—
powd., bbls., bxs.	lb.	.65	—
Verona, bls.	lb.	.35	—
powd., bbls., bxs.	lb.	.45	—

Orthoanisidine (see o-Anisidine).
Orthochlorobenzaldehyde (see o-Chlorobenzaldehyde)
Orthochloroaniline (see o-Chloroaniline).
Orthochlorobenzoic acid, (see o-Chlorobenzoic acid).
Orthochloroparanitroaniline (see 2-Chloro-4-nitroaniline).
Orthochlorophenol (see o-Chlorophenol).
Orthocresol (see o-Cresol).
Orthocresotinic acid (see 2,3-Creosotic acid).
Orthodichlorobenzene (see o-Dichlorobenzene).
Orthonitroaniline (see o-Nitroaniline).
Orthonitrochlorobenzene (see o-Nitrochlorobenzene).
Orthonitroparachlorophenol (see 2-Nitro-4-Chlorophenol).
Orthonitrophenol (see o-Nitrophenol).
Orthonitrotoluene (see o-Nitrotoluene).
Orthophenetidine (see o-Phenetidine).
Orthophenylphenol (see o-Phenyl phenol).
Ortho-tertiary amylphenol (see o-tert-Amylphenol)
Orthotolidine (see o-Tolidine base).
Orthotoluidine (see o-Toluidine).

Ouabain, USP, bots.	gram	3.00	4.00
Ouricury wax, crude, bgs.	lb.	.77	.78
Refd., pure, bgs	lb.	.83	.85
Oxalic acid, bgs., dms., c.l., works.	lb.	.18	.18½
bgs., dms., 10,000-lb. lots, works.	lb.	.18¼	.18¾
bgs., dms., smaller lots, works.	lb.	.19¼	.19¾
b-Oxynaphthoic acid, fib dms., 250 lbs. or more, frt. alld.,	lb.	1.14	1.17
Oxyquinolin sulfate, cns., 100-lb. lots, works,	lb.	4.75	5.00
cns., smaller lots, works	lb.	4.92	5.17

P

Palm oil, clarif., dms.	lb.	.15¾	.16¾
tanks	lb.	.1315	—
Palm oil acid, dist., dms.	lb.	.15¾	.19¼
tanks	lb.	.13¾	.14¼
Palmarosa oil, cns.	lb.	3.75	6.00
Papain, NF, powd.	lb.	6.00	7.00
Papaverine hydrochloride, nat. or syn., USP, cns. 25-oz. to 100-oz. lots	oz.	5.00	—
cns., smaller lots	oz.	5.05	5.20
Papaverine sulfate, nat. or syn., USP, cns.,	oz.	7.10	7.35
Paprika, Bulgarian bgs.	lb.	.34	.35
Hungarian, bgs.	lb.	.34	—
Spanish, bgs	lb.	.53	—
Yugoslavian, bgs.	lb.	.34	—

Para-aminobenzoic acid (see p-Aminobenzoic acid)
Parachlorobenzoic acid (see p-Chlorobenzoic acid).
Paramethylphenylcinchonic acid (see Neocinchophen).
Paranitrobenzoic acid (see p-Nitrobenzoic acid).
Paratoluidinemetasulfonic acid (see p-Toluidine-m-sulfonic acid).
Para-aminophenol (see p-Aminophenol).
Parachloro-orthonitroaniline (see 4-Chloro-2 nitroaniline).
Para-anisidin (see p-Ansidine).
Parachloraniline (see p-Chloraniline).
Parachlorobenzaldenyde (see p-Chlorobenzaldehyde).
Parachlorophenol (see p-Chlorophenol).
Paracresol (see p-Cresol).
Paradibromobenzene (see p-Dibromobenzene).
Paradichlorobenzene (see p-Dichlorobenzene).

Para toner, red, bbls.	lb.	1.21	—
Chlorinated, kgs.	lb.	1.35	—

Paraffin, crude, scale, white, 123°-127°F, ASTM, tanks, refy.	lb.	.0655	—
Paraffin, fully refd., 122°-124°F, ASTM, tanks, refy	lb.	.0765	—
125°-127°F., ASTM, tanks, refy.	lb.	.0765	—
130°-132°F., ASTM, tanks, refy.	lb.	.0765	—
132°-134°F., ASTM, tanks, refy.	lb.	.0765	—
135°-137°F., ASTM, tanks, refy.	lb.	.0765	—

AMP temperatures are an arbitrary 3°F. higher than ASTM.

Paraffin oil, pale, 100-110 vis. at 100°F., tanks, east coast refy.	gal.	.14	—

Paraffin wax (see Paraffin).

Paraformaldehyde, 91%, flake, bgs., c.l., frt. alld	lb.	.0955	—
bgs., l.c.l., frt. alld.	lb.	.1155	.1255
91%, powd., bgs. c.l., ex whse	lb.	.167	—
bgs., l.c.l., ex whse.	lb.	.182	—
USP-X, fib. dms., c.l.	lb.	.19	—
fib. dms., 1,000-lb. lots	lb.	.20	—
fib. dms., smaller lots	lb.	.21½	—
Paraldehyde, tech., 98%, 55-gal. dms., t.l., divd	lb.	.14	—
55-gal. dms., l.c.l., divd	lb.	.15	—
tanks, divd.	lb.	.11½	—

Paranitroaniline (see p-Nitroaniline).
Paranitrochlorobenzene (see p-Nitrochlorobenzene).
Paranitrotoluene (see p-Nitrotoluene.
Paranitrophenol (see p-Nitrophenol).
Paraphenetidine (see p-Phenetidine).
Paraphenylenediamine (see p-Phenylenediamine).
Paraphenylphenol (see p-Phenylphenol).
Para-tertiary-amylphenol (see p-tert-Amylphenol).
Para-tertiary butylphenol (see p-tert-Butylphenol).

Parathion, ethyl, dms., frt. alld.	lb.	.84	—

Parathion prices 2c. per lb. higher in West.

Paratoluenesulfonamide (see p-Toluenesulfonamide).

Paris green, dealers, 100 lb. dms., frt. alld	lb.	.45	—
Passion flower herb, bls.	lb	No stocks.	
mills	ton.	63.00	—
Patchouli oil, imp., cns.	lb.	4.80	—

Peach kernel oil, USP (see Apricot kernel oil).

Peacock blue, fugitive, 100% color strength, 250-lb., bbls., divd. E. of Rockies	lb.	1.00	—

Peacock blue price 1c. higher W. of Rockies.

Peanut meal, 45%, old process, bgs., mills	ton.	56.00	—
Peanut oil, crude, tanks, f.o.b. mills.	lb.	.13¾	—
Refd., dms.	lb.	.19¼	.19¼
tanks	lb.	.17¼	—
Pectin, dom., NF, citrus, powd., bbls.	lb.	2.05	2.06
tech., powd., 150 jelly grade.	lb.	1.28	—
Imp., Danish, ex whse	lb.	1.28	—
Penicillin potassium, cryst., bulk, 1,000,000 units.		.027	.028
Penicillin, procaine, bulk 1,000,000 units.		.027	.028
Pennyroyal oil, USP, imported, cns.	lb.	3.30	3.10
Pentachlorophenol, bgs., c.l., t.l., works, frt. equald.	lb.	.21	—
bgs., l.c.l., same basis	lb.	.22½	.20

Pentachlorophenol in dms. 1c. higher.

Pentaerythritol, tech., bgs., c.l., divd.	lb.	.31	—
bgs., l.c.l., divd	lb.	.32	—

Pentaerythritol, di- and tri- isomers (see Dipentaerythritol and Tripentaerythritol).

Pentane, indust., tanks, Tex. refy.	gal.	.14	—
Pentobarbital, dms., 100 lbs. or more	lb.	6.00	—
Pepper, black, Malabar, bgs.	lb.	.24¾	—
black, Lampong, bgs	lb.	.24½	—
Red, Funtuas, bgs.	lb.	.30	—
Japanese, Hontaka, bgs	lb.	.30	—
Santaka, bgs.	lb.	.30	—
Sudanese, bgs.	lb.	.36	—
White, Muntok, bgs	lb.	.45	—
Peppermint leaves, dom., USP, bls., dms	lb.	.70	.75
Imp., USP., bls	lb.	.85	—
Peppermint oil, nat., dms.	lb.	3.70	4.65
Redist., USP, dms.	lb.	3.90	5.15
Perchloroethylene, dms., c.l. or t.l., divd	lb.	.13½	—
dms., l.c.l., divd	lb.	.15¼	—
tanks, divd.	lb.	.11¾	—
tanktruck, 1,000 gal. min. divd.	lb.	.12¼	—
Peri acid, dry, bbls., frt. alld	lb.	1.60	—
Paste, bbls., frt. alld	lb.	1.55	—
Peru balsam, dms.	lb.	1.35	1.75

Persic oil, USP (see Apricot kernel oil).

Petitgrain oil, South American cns., dms	lb.	2.45	—
Petrolatum, cream, dms., c.l., refy.	lb.	.08125	—
dms., l.c.l., divd.	lb.	.10125	.11375
tanks, refy.	lb.	.05875	—
Extra amber, dms., c.l., refy	lb.	.07125	—
dms., l.c.l., divd.	lb.	.09125	.10375
tanks, refy.	lb.	.04875	—
Lily white, dms., c.l., refy.	lb.	.08625	—
dms., l.c.l., divd.	lb.	.10625	.12
tanks, refy.	lb.	.06735	—
USP, snow white, dms., c.l., refy.	lb.	.09125	—
dms., l.c.l., divd.	lb.	.11125	.125
tanks, refy.	lb.	.06875	—
USP, soft yellow, dms., c.l., refy.	lb.	.07125	—
dms., l.c.l., divd.	lb.	.095	.10375
tanks, refy.	lb.	.04875	—

Petroleum pitch (see Asphalt, petroleum).

Petroleum Products

Petroleum product quotations are listed individually. For example, prices on Petroleum, mineral spirits, may be found in the M's under Mineral spirits, petroleum.

Petroleum sulfonate, oil soluble, 60-62% sulfonic content, non-ret. dms., c.l., works	lb.	.16½	.16¾
non-ret. dms., l.c.l., works.	lb.	.17½	.19
tanks, works	lb.	.14¼	.17
50-55%, sulfonic content, non-ret. dms., c.l., works	lb.	.16	—
non-ret. dms., l.c.l., works	lb.	.17	—
tanks, works	lb.	.13	—
o-Phenetidine, dms. c.l., frt. alld. E	lb.	.91	—
dms., l.c.l., same basis	lb.	.93	—
p-Phenetidine, dms., c.l., frt. alld.	lb.	1.05	—
dms., same basis	lb.	1.08	—

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U.S.I. CHEMICAL NEWS

May ★ A Series for Chemists and Executives of the Solvents and Chemical Consuming Industries ★ 1959

First Technical Book On Aerosols Published

For the first time, complete information on packaging products in pressurized containers has been set down in one place — a 411-page book by Herzka and Pickthall titled "Pressurized Packaging (Aerosols)," now being sold.

Chapters give detailed information on propellents, containers, valves, filling methods, laboratory procedures, emulsion systems and perfumes. Graphs, charts and photos illustrate all chapters, which are followed by lists of literature references and significant patents.

Formulations — over 200 in all — are included, on a wide range of products from insecticides and paints to cosmetics, perfumes and foods. Appendices cover common abbreviations, technical terms, trademarks and trade-names, and aerosol producers throughout the world. The book is considered an extremely valuable reference for both research and development and management groups.

New U.S.I. Sales Office Opens in San Francisco

U.S.I. has established a San Francisco sales office, managed by Kenneth Fietz, who has been a representative of the company's New York Sales Division for the past 16 years. The new office, located at 220 Montgomery Street, was created to serve U.S.I. customers in central and northern California, Oregon and Washington. This office is tied in with U.S.I.'s automated communications system through Pacific Coast headquarters in Los Angeles. This will facilitate the processing of orders and messages by the company's offices and plants in all parts of the country.

H^3-Labeled Methionine Gives Clue to Protein Synthesis in Cells

In a recent study of protein synthesis in the cells of adult mice, DL-methionine labeled with tritium (H^3) was injected into test animals and then traced by radioautography methods. Results revealed that the most active protein synthesis involving methionine takes place continuously and independently within the cytoplasm and nuclear chromatin. Very little protein is synthesized from methionine in the nucleolus.

In this particular study, tritium was used as the tracer element because its low β-ray energy allows good radioautographic resolution. Previous investigations with S^{35}-labeled methionine had shown only that this amino acid is continuously being incorporated into protein in all cells. However, the exact distribution of synthesis in the nucleus and cytoplasm could not be determined up to this time because the high β-ray energy of S^{35} prevented good resolution.

U.S.I. Starts Up 75-Million-Lb. Polyethylene Plant at Houston

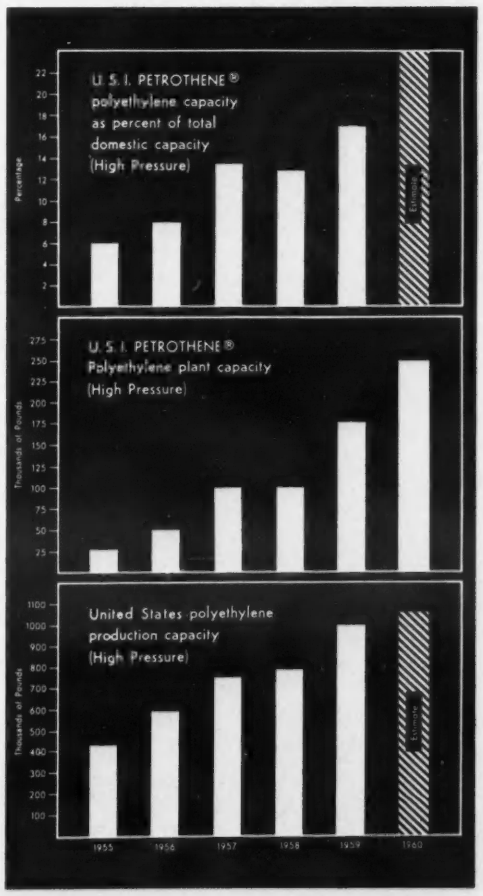
Low and Medium Density Resins Being Produced by High Pressure Process. Plans Already Underway to Double Capacity.

U.S.I.'s new high pressure polyethylene plant has just been put into operation at Houston, Texas, to make 75 million pounds per year of PETROTHENE® resins. The Houston installation was rushed into production some six to eight weeks ahead of schedule when demand for PETROTHENE resins began to outrun supply late in 1958.

As a result of this demand, a major expansion is already being planned, to double the new plant's capacity and bring the company's PETROTHENE output in Houston to 150 million pounds of high pressure polyethylene per year. At Tuscola, Illinois, U.S.I. now turns out about 100 million pounds of polyethylene annually. Thus, when the planned expansion at Houston is completed late in 1960, total U.S.I. capacity will be 250 million pounds of high pressure resins per year. This will make the company the second largest polyethylene producer in the country.

The new plant is well situated on the Houston Ship Channel for shipment of resins by all means of transportation. Export shipments are facilitated by the extensive port facilities available in Houston. The new installation is assured of a plentiful supply of ethylene — the major raw material — from salt dome storage facilities.

MORE



Oils Solubilized in Alcohol By New Patented Technique

Drug and cosmetic manufacturers can now formulate water-clear, non-aqueous products containing both oils and low-molecular-weight alcohols, via a new solubilizing technique described in U.S. Patent No. 2,865,859 issued recently.

According to the patent, it has never been possible commercially to prepare cosmetic or industrial solutions containing these alcohols plus large quantities of oil. Layering has always taken place. The technique described makes miscibility possible by including low-molecular-weight aliphatic alcohol esters of high-molecular-weight fatty acids.

Mixtures of esters such as ethyl laurate, butyl myristate, amyl oleate, propyl linoleate or isopropyl palmitate are cited. The resulting solutions would contain 20-50% oil, 20-50% low alcohol and 5-20% ester. The oils may be of any class — animal, vegetable or mineral — and the alcohols preferably in the one to five carbon group, such as ethanol, methanol and isopropyl alcohol.

Suggested formulations are given for cosmetic compositions which are claimed highly stable over a wide temperature range for long periods, without separation. Examples include sun-screening compounds, hand lotions, hair preparations, soaps, colognes, antiperspirants and after-shave lotions.

Other suggested fields of applications include metal working compounds, coatings, dry cleaning fluids, hydraulic fluids, biocides and lubricants.

NaK Basis of Prefab High-Temperature Test Loop

A high-temperature test loop, which uses NaK (sodium-potassium alloy) as the circulating medium, is now available as a package unit for research and study purposes.

The loop, designed for 1,000° F, can be employed to examine NaK's natural circulation characteristics, to study oxygen solubility in the alloy, to analyze flowmeter and pump performance, expansion treatment and piping arrangement, to investigate corrosion, mass transfer and metal stress, to design heat exchangers, and to develop pumps.

The unit consists of heaters and coolers, heat exchangers, EM pumps and flowmeters, cold trap, plugging indicators and instruments.

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May ★ **U.S.I. CHEMICAL NEWS** ★ 1959

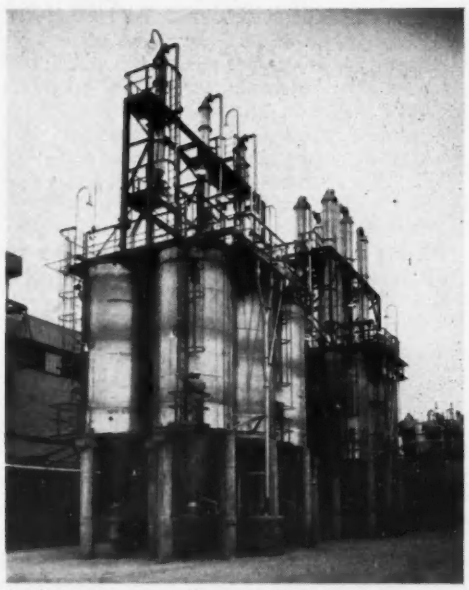
CONTINUED

Polyethylene

Other Resins Under Consideration

The company is now producing low density (.913 – .924) and medium density (.925 – .929) resins at the Houston unit. However, extensive research work has been done on the new high density polyethylenes and a process has been developed which is believed superior to any now used, both from a product quality and production cost standpoint. The process has not yet been commercialized due to the current market conditions on high density materials. U.S.I. is also studying polypropylenes and other polyolefins in pilot plant, and hopes to have more to say about them later in the year.

In less than four years U.S.I. has advanced from a nonproducer of polyethylene resins to its present position as third largest producer in the field. Commencing with an output of 26 million pounds in 1955, production increased to 50 million in 1956, 100 million in 1957, and now 175 million pounds. When the contemplated expansion at Houston is completed, the company will have realized a total increase in production capacity of some 900% since 1955.

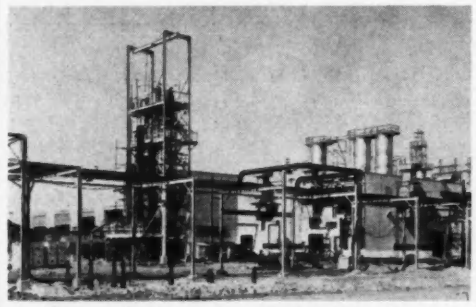


Product storage silos at U.S.I. polyethylene plant, Houston, Texas.

Film Grades a Specialty

Although U.S.I. makes a full line of resins for all applications, much of its growth in polyethylene has been based on special efforts to develop improved coating and film grade resins. Recently the company pioneered a technique for producing crystal-clear cast film. This material has excellent potential in the huge bread wrap field and other large-volume overwrap markets.

Tailor-making resins for specific purposes was originally and still is one of the distinguishing features of U.S.I. as a polyethylene producer. In all, the company markets some 70 resins today, each varying somewhat in melt index, density, strength, clarity, gloss, slip, stiffness and other properties.



Gas-producing area at Houston plant.

Two New Aerosol Formulas Contain Anhydrous Alcohol

Two new formulations — one for a white shoe polish, the other for a stocking-run stopper — have been developed by one chemical manufacturer for consideration by aerosol packagers.

The run-stopping spray consists of equal parts of anhydrous ethanol and a fast-drying adhesive, plus propellant, coloring and perfume. The formula is said to be nonflammable, and is considered stable, although stability tests have not been completed as yet. Recommended filling pressure and method of application are given.

The shoe polish spray — containing an ethanolic solution of PVP/VA, a sebacate, titanium dioxide, glycerine, isopropanol, acetone and propellant — is claimed to eliminate messy handling and to allow easy touch-up. Filling techniques, valve types and pressure are suggested.

TECHNICAL DEVELOPMENTS

Information about manufacturers of these items may be obtained by writing U.S.I.

Radioactive crystalline C^{14}-L-glutamine can now be obtained for in vivo studies of blood-brain barrier permeability and biological utilization of glutamine by brain and other organs. Specific activity of product is 27.8 μ/mg. **No. 1470**

New carbon-monoxide-poisoning test kit now on market determines extent of CO poisoning in a minute by testing exhaled air or in under five minutes by testing blood sample. Color change in treated silica gel indicates % CO in blood. **No. 1471**

Reactor fuel technology is covered in new, 120-page volume now being sold. Includes papers and discussion on economic fuel selection, blanket fuel systems, types of uranium systems, types of fuel elements, cladding and canning. **No. 1472**

Phosphorus pentasulfide safe-handling practices are described in 14-page safety data booklet which can now be purchased. Discusses hazards, protective equipment, containers, waste disposal, first aid, medical care. **No. 1473**

A circular, slide-rule-type of device, which predicts whether a chemical reaction is possible for 10,000 different chemical equations, is now available to chemists and chemistry students. Complete use instructions given. **No. 1474**

Refined ethylene of 99.5% minimum active-ingredient content is described in new data sheet now being offered. Data includes specifications, properties, shipping information, uses plus references on use as ripening agent. **No. 1475**

New analyzer, said to determine amounts of over 20 amino acids in a protein hydrolysate in only 22 hours, is described in new brochure. Results claimed consistent within 2-3%. Typical run shown. Specifications given. **No. 1476**

Cold caustic pulping of mixed hardwoods is detailed in technical report now offered. Includes complete process description, equipment data, flow sheet, quality control tests. Discusses results of studies on pulping variables. **No. 1477**

Niobium and its compounds are described in new book now being sold. Chapters cover sources, supply, economics, extraction, separation, metal preparation, impurities, properties, plating, alloys, reactions, nuclear uses. **No. 1478**

Over 125 radioactive measuring instruments are listed in new 76-page catalog. Detecting, counting and recording instruments are described. Included are systems for research, medicine and education. **No. 1479**

PRODUCTS OF U.S.I.

POLYETHYLENE RESINS

PETROTHENE® is the registered trademark for U.S.I.'s polyethylene resins. PETROTHENE resins are used in a wide variety of end uses such as film extrusion, pipe extrusion, extrusion coating, wire and cable coating, calendering, injection molding, blow molding, thermoforming and compression molding.

OTHER PRODUCTS

Heavy Chemicals: Anhydrous Ammonia, Ammonium Nitrate, Nitric Acid, Nitrogen Fertilizer Solutions, Phosphatic Fertilizer Solution, Sulfuric Acid, Caustic Soda, Chlorine, Metallic Sodium, Sodium Peroxide, Sodium Sulfite, Sodium Sulfate.

Pharmaceutical Products: DL-Methionine, N-Acetyl-DL-Methionine, Urethan USP, Riboflavin USP, Intermediates.

Alcohols: Ethyl (pure and all specially denatured formulas); Anhydrous and Regular Proprietary Dentured Alcohol Solvents SOLOX®, FILMEX®, ANSOL® M, ANSOL PR.

Organic Solvents and Intermediates: Normal Butyl Alcohol, Amyl Alcohol, Fusel Oil, Ethyl Acetate, Normal Butyl Acetate, Diethyl Carbonate, DIATOL®, Diethyl Oxalate, Ethyl Ether, Acetone, Acetoacetanilide, Acetoacet-Ortho-Chloranilide, Acetoacet-Ortho-Toluidide, Ethyl Acetoacetate, Ethyl Benzoylacetate, Ethyl Chloroformate, Ethylene, Ethyl Sodium Oxalacetate, Sodium Ethylate, ISOSEBACIC® Acid, Sebacic Acid, Urethan U.S.P. (Ethyl Carbamate), Riboflavin U.S.P.

Animal Feed Products: Antibiotic Feed Supplements, BHT Products (Antioxidant), Calcium Pantothenate, Choline Chloride, CURBAY B-G®, Special Liquid CURBAY, VACATONE®, Menadione (Vitamin K_3), DL-Methionine, MOREA® Premix, Niacin USP, Riboflavin Products, Special Mixes, U.S.I. Permadry, Vitamin B_{12} Feed Supplements, Vitamin D_3, Vitamin E Products, Vitamin E and BHT Products.

U.S.I INDUSTRIAL CHEMICALS CO.
Division of National Distillers and Chemical Corporation
99 Park Avenue, New York 16, N. Y.

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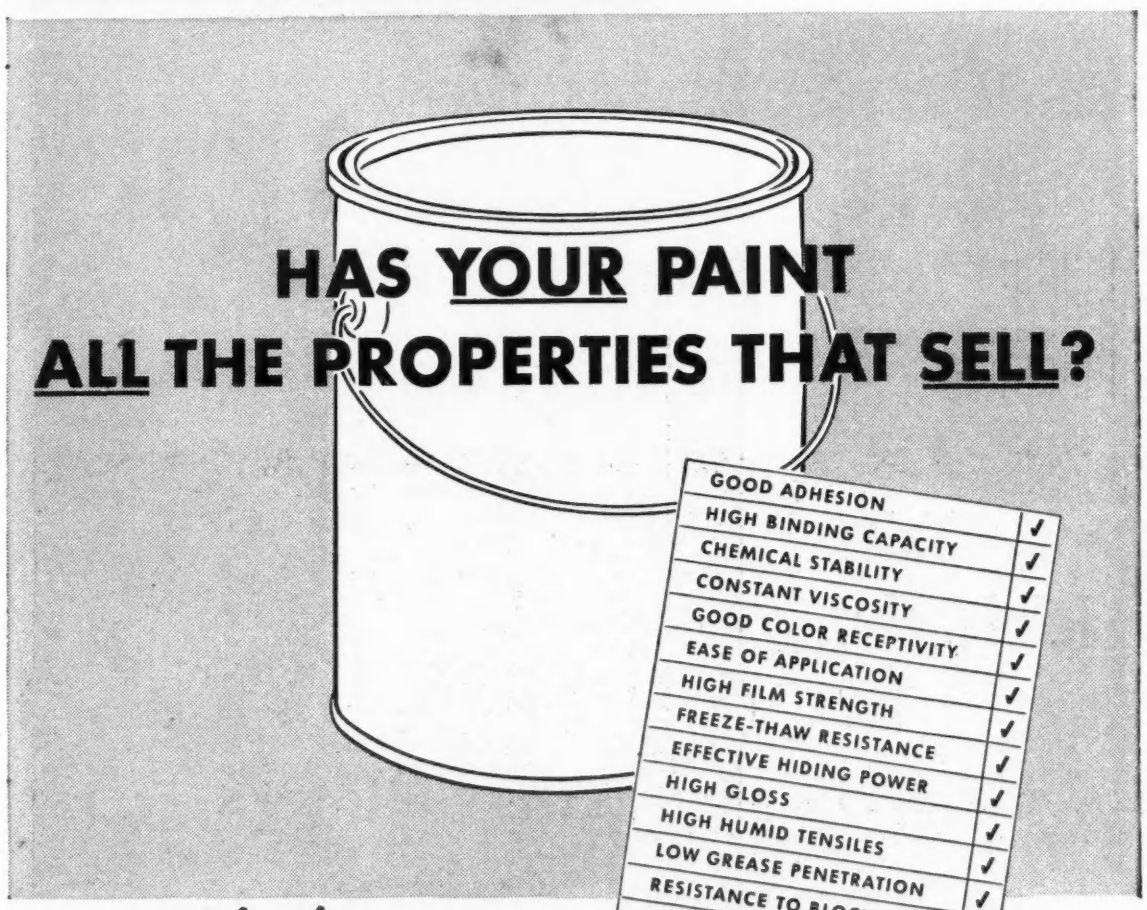
Phenobarbitol, USP, dms., 100-lb. lots	lb.	1.25	—
Phenobarbital-Sodium (see sodium phenobarbital).			
Phenol, 90-92% (cresol 8-10%) non-ret dms., frt. alld. E of Rockies	lb.	.16¾-	.17½
non-ret dms. l.c.l. same basis	lb.	.17¾-	.18½
tanks, same basis	lb.	.14¾-	.15½
82-84% (cresol 16-18%) non-ret, dms., c.l., same basis	lb.	.16½-	.17
non ret. dms., l.c.l., same basis	lb.	.17½-	.18
tanks, same basis	lb.	.14½-	.15
39° C or above, tar acid, distilled, non-ret, dms., c.l., same basis	lb.	.18 -	.19
non-ret dms., l.c.l., same basis	lb.	.19 -	.20
tanks, same basis	lb.	.16 -	.17
USP, syn., dms., c.l., t.l. frt. alld.	lb.	.18½-	—
dms., same basis	lb.	.20½-	—
tanks, same basis	lb.	.16½-	—
Phenolphthalein, USP or yellow, 250-lb. dm., 2,000 lbs., frt. alld.	lb.	1.30 -	—
250-lb. dm., same basis	lb.	1.35 -	—
Phenothiazine drench fib dms. t.l., dlvd	lb.	.44 -	—
fib. dms. t.t.l., same basis	lb.	.47 -	—
NF, fib. dms., t.l. same basis	lb.	.43 -	—
fib dms., l.t.l., same basis	lb.	.46 -	—
Phenyl acetate, dms. 100-lb. lots, works	lb.	.50 -	—
Phenyl salicylate (see Salol).			
Phenylacetaldehyde, soln., 50%, bots	lb.	2.95 -	—
100%, bots.	lb.	4.00	4.65
Phenylacetic acid, pure, cryst. cns.	lb.	1.25	1.75
dl-Phenylalanine, dms works	lb.	27 00	37.50
l-Phenyl-3-carbethoxy pyrazolone-5, fib dms 200-lb lots dlvd E.	lb	3.45 -	—
fib. dms., smaller lots, dlvd. E	lb.	3.80 -	—
N-Phenyldiethanolamine dms., c.l., dlvd E	lb.	.41 -	—
dms., l.c.l., dlvd. E	lb.	.42½-	—
tanks, dlvd. E	lb.	.38½-	—
m-Phenylenediamine, dms. frt alld.	lb.	1.10 -	—
o-Phenylenediamine comi., 100 to 1,000 lbs., fib. dms., works	lb.	1.70	1.80
p-Phenylenediamine, refd., dms., works	lb.	1.42 -	—
Tech., dms., works	lb.	1.40 -	—
Phenylethanolamine, dms., c.l., works	lb.	.75½-	—
dms., l.c.l., same basis	lb.	.77 -	—
Phenylethyl acetate bots.	lb.	1.30	1.60
2-Phenylethyl alcohol extra, dms.	lb.	1.14	1.50
Standard, dms.	lb.	1.10	1.60
b-Phenylethylamine, dms., 1,000-lb. lots, works	lb.	1.10	—
dms., smaller lots works	lb.	1.15	1.40
Phenylethylphenyl acetate, bots.	lb.	4.00	4.25
Phenylglyconic acid (see Mendelic acid).			
Phenylhydrazine, 97%, 450-lb dms.	lb.	1.45 -	—
1-Phenyl-3-methyl pyrazolone-5, fib. dms., 250-lb. lots, dlvd. E	lb.	1.80 -	—
fib, dms., smaller lots, dlvd. E	lb.	2.10 -	—
o-Phenylphenol, dms., l.c.l., works.	lb.	.48 -	.50
p-Phenylphenol, bgs., c.l., works	lb.	.38½-	—
bgs., l.c.l., works	lb.	.43 -	—
Philippine copal gum, pale, chips, bgs	lb.	.23¾-	.26
nubs, bgs.	lb.	.33¼-	.37
seeds, bgs.	lb.	.20	Nom.
sorts, bgs.	lb.	.22¾-	.25
Phloroglucinol, comi., fib. dms., works	lb.	6.40 -	—
CP, bots., works	lb.	17.75 -	—
Tech., fib. dms., works	lb.	10.45 -	—
Phloxin red toner (see Eosin red toner).			
Phosgene, ret. cyls., works	lb.	.15½-	—
Phosphate, defluorinated (see under D).			
Phosphate rock, Curacao, Atlantic ports, New Orleans	ton.	48.00 -	—
Phosphate rock, Florida, land pebble, run-of-mine, washed, dried, unground, 66-68%, b.p.l., bulk, c.l., mines.	long-ton.	5.16 -	—
63-70%, b.p.l., bulk, c.l., same basis	long-ton.	5.56 -	—
70-72%, b.p.l., bulk, c.l., same basis	long-ton.	6.21 -	—
74-75%, b.p.l., bulk, c.l., same basis	long-ton.	7.21 -	—
76-77%, b.p.l., c.l., bulk, same basis	long-ton.	8.21 -	—
Above Florida prices are based on fuel oil at $2.37 per bbl. and labor at $1.52.			
Phosphoric acid, food grade, 75%, cbys., c.l., works, E., frt. equald	100 lbs.	7.00 -	—
cbys., l.c.l., same basis,	100 lbs.	7.25 -	7.75
tanks, t.w., works	100 lbs.	5.60 -	—
80%, cbys., c.l., frt. equald	100 lbs.	7.85 -	—
cbys., l.c.l., works	100 lbs.	8.10 -	9.35
tanks, t.w., works	100 lbs.	6.00 -	—
NF, 85%, cbys., c.l., works	100 lbs.	8.50 -	—
cbys., l.c.l., works	100 lbs.	8.75 -	9.00
tanks, t.w., works	100 lbs.	6.65 -	—
Phosphorus, amorph., red, dms., t.l., works	lb.	.55 -	—
dms., smaller lots, works	lb.	.56 -	.57
Phosphorus, amorph., white (yellow), solid, dms., c.l., works, frt. equald	lb.	.20 -	.20½
dms., l.c.l., works, frt. equald	lb.	.21½-	—
tanks, works, frt. equald	lb.	.19 -	—
Phosphorus oxychloride, dms., c.l., works	lb.	.14 -	—
dms., l.c.l., works	lb.	.15 -	—
tanks, works	lb.	.12½-	—
Phosphorus pentasulfide, powd., dms., c.l., works	lb.	.13½-	—
dms., l.c.l., works	lb.	.14½-	.15½
Solid, dms., c.l., works	lb.	.11½-	—
dms., l.c.l., works	lb.	.12½-	.13½
Phosphorus pentoxide, dms., c.l., works	lb.	.1395-	.1450
dms., l.c.l., works	lb.	.1550-	.1650
Phosphorus sesquisulfide, dms., cs., c.l., works	lb.	.38 -	—
dms., l.c.l., works	lb.	.39 -	.40
Phosphorus trichloride, dms., c.l., works	lb.	.14 -	—
dms., l.c.l., works	lb.	.15 -	—
tanks, works	lb.	.12½-	—
Phthalic anhydride, bgs., c.l., works, frt. equald	lb.	.17 -	—
bgs., l.c.l., same basis	lb.	.18 -	—
tanks, same basis	lb.	.16½-	—
Phthalimide, 97-98%, dms., frt. alld	lb.	.65 -	—
Phthalocyanine blue, full strength, bbls., dlvd. E. of Rockies	lb.	2.90 -	—
Resinated, bbls., same basis	lb.	2.75 -	—
Water dispersable, bbls., same basis	lb.	1.52 -	—
Pythalocyanine blue prices 1c. higher W. of Rockies.			
Phthalocyanine green toner, bbls., works			—
Resinated, bbls.	lb.	3.00 -	—
Water dispersable, bbls			
Phthalocyanine green prices 1c higher W. of Rockies.			
Phthalylsulfacetamide, fib dms., 1,000-lb. lots or more	lb	5.00 -	—
NF, fib. dms.	lb.	5.20 -	—
a-Picoline, dms., c.l., works, frt. equald	lb.	.43 -	.43½
dms., l.c.l., works, frt. equald	lb.	44 -	—
tanks, same basis	lb.	415 -	.422
b-Picoline, 98%, dms., t.l., works.	lb.	1.05 -	—
dms., l.c.l., same basis	lb.	1.15 -	—
tanks, same basis	lb.	.95 -	—
b,g-Picoline, 5°C. dms., c.l., works.	lb.	.32½-	—
dms., l.c.l., works	lb.	.33 -	—
g-Picoline, tanks, f.o.b., works	lb	1.50 -	—
dms., t.l., same basis	lb.	1.60 -	—
Picric acid, NF, bbls.	lb.	85 -	—
Tech, bbls.	lb.	44 -	—
Pigment green B, kgs.	lb	1.45 -	—
Pilocarpine hydrochloride, USP bots	oz.	5.25 -	—
Pilocarpine nitrate, USP bots. vials.	oz.	5.15 -	—
Pimento, Jamaican, bgs	lb.	.68 -	—
Mexican, bgs.	lb.	.58 -	—
Pimento berry oil, NF, dms.	lb.	3.75	9.25
Pimento leaf oil, cns	lb.	2.10 -	—
Pine oil, dest.-dist., dms., l.c.l. works	lb.	.15 -	—
dms., l.c.l. ex whse New York.	lb.	173 -	—
Pine oil, steam-dist., dms., ex whse. New York	lb.	.185 -	—
dms., dlvd.	lb.	.188 -	—
Pineneedle oil, Siberian (see Abies Siberica oil)			
Pinetar oil, comi., dms., c.l., works.	lb.	.0561-	—
dms., l.c.l., works	lb.	.0634-	—
dms., c.l., ex whse New York.	lb.	.0743-	—
tanks, works	lb.	.046 -	—
Pinetar oil, NF, rectified, dms., incl., l.c.l., works, South.	lb.	.40 -	—
dms., l.c.l., ex whse, New York	lb.	.41½-	—
Refd., dms., incl., l.c.l., works	lb.	.35 -	—
dms. incl. l.c.l., ex whse New York	lb	.36½-	—
Pink root, bls.	lb.	1.75 -	—
Piperazine, anhyd., dms. t.l., frt. alld	lb.	1.60 -	—
dms., l.c.l., same basis	lb.	1.65 -	—
Piperazine citrate, 36%, dms., 1,000 lbs. or more, frt. alld	lb.	1.04 -	—
Piperazine dihydrochloride, 51%, dms., 1,000 lbs. or more, frt. alld	lb	1.12 -	—
Piperazine hexahydrate 44%, dms., 1,000 lbs. or more frt. alld	lb.	77 -	—
dms., l.t.l., same basis	lb.	.90 -	—
Piperazine phosphate, 42%, dms., 1,000 lbs or more., frt. alld	lb.	.96 -	—
Piperidine, dist., 98% min., dms., frt. equald	lb	2.70 -	—
Piperonyl butoxide, dms. dlvd E	lb	4.50	5 03

Pitches

Pitch quotations are listed individually. For example, prices on Pitch, soybean, may be found in the S's under Soybean pitch.

Plaster of Paris (see Gypsum)			
Platinum metal, works	oz.	75.00	80.00
Pleurisy root, bls	lb	45	50
Podophyllum resin, NF, dms.	lb.	15.60 -	—
Poke root, bls	lb	19	22
Polymyxin, bulk, bots., 50 billion units or more 1,000,000 units.		52	—
bulk, bots., 25-50 billion units, 1,000,000 units.		.54 -	—
bulk, bots. 1-25 billion units, 1,000,000 units.		.56 -	—
Polyoxyethylene sorbitan monostearate, dms. 20,000-lb. lots, works	lb	42	—
dms., 10,000-20,000-lb. lots, works.	lb.	44 -	—
dms., smaller lots, works	lb	47	49
Polyoxyethylene sorbitan tristearate, dms., 20,000-lb lots, works.	lb	42	—
dms., 10,000-20,000-lb. lots, works	lb.	44	—
dms., smaller lots, works	lb.	47	49

Naugatuck LATEX



Check Naugatuck Latex

Whether you have an actual paint "problem" or not, chances are that one of Naugatuck's many paint latices or formulations can help you to improve your product's performance.

Naugatuck's unparalleled experience helped make today's latex paint success story possible.

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Naugatuck Chemical Division

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Pontianak Copal Gum—Propylene Glycol Methyl Ether

Pontianak copal gum chips bgs	lb	26	—
Nubs bgs	lb	.37	.40
Poppy seed, Argentine, bgs.	lb	No stocks.	
Dutch, bgs.	lb.	.20	—
Danish, bgs.	lb.	.19	—
Polish, bgs.	lb.	.20	—
Turkish, bgs.	lb.	.18	—
Potash caustic, liq., 45% basis.			
dms., c.l., works 100 lbs		4.25	—
dms., l.c.l., same basis 100 lbs		5.05	—
tanks same basis 100 lbs		3.70	—
flake, 88-92%, dms., c.l., same basis 100 lbs.		9.15	—
dms., l.c.l., same basis. 100 lbs.		10.20	—
Potash, solid, 88-92%, dms., c.l., works 100 lbs.		8.70	—
dms l.c.l. works 100 lbs		9.75	—
Potassium acetate, NF, 200-lb. dm., f.o.b. works E	lb.	.31	—
Potassium bicarbonate, USP, gran. dms	lb.	.22	—
USP, powd., dms.	lb.	.24	—
Potassium bichromate, gran., bgs., c.l., l.l., works	lb.	.18	—
bgs., l.c.l., works	lb.	.18½-	.19¾
Potassium bichromate in dms. ¾c higher.			
Potassium bitartrate, dom. NF, gran or powd. dms., c.l	lb	.40	—
dms., 5,000 lbs. 1 shipt.	lb.	.40½-	—
dms., smaller lots	lb.	.41	.43
Imp., NF, gran. or powd., kgs.	lb.	.29	—
Potassium borohydride, powd., dms., works	lb.	16.00	-22.00
Pelletized postassium borohydride $1.25 per lb higher in 1,000-lb. lots.			
Potassium bromate, dms., 1,000-lb. lots or more, works	lb.	.50	—
dms., smaller lots, works	lb.	.52	.62
Potassium bromide, USP, gran. bbls., kgs	lb.	.39	.40
Potassium carbonate, dom., NF, gran., bbls dms	lb.	.20	—
Potassium carbonate, dom. tech., powd., bbls., dms	lb.	.21	.22
calcined bgs. c.l. works 100 lbs.		8.50	—
bgs., l.c.l., same basis.	100 lbs.	9.55	—
Potassium carbonate, hydrated, 83-85%, bgs., c.l., works. 100 lbs.		7.10	—
bgs., l.c.l., works 100 lbs.		8.15	—
Potassium chlorate, cryst., dms., c.l., works	lb.	.12¼-	—
dms., l.c.l., works	lb.	.13½-	.14½
Powd., dms., c.l., works	lb.	.12¾-	—
dms., l.c.l., works	lb.	.14 -	.15
works	lb.	.12¼-	—
Potassium chlorate, NF, cryst., dms., 2,000 lbs or more works.	lb.	.16¾-	—
NF, gran. 25-lb. metal dms	lb.	.36 -	—
NF, powd., dms., 2,000 lbs. or more, works	lb.	.17¼-	—
Potassium chloride, indust., 99.9% KCL, bulk, c.l., works	ton.	29.00 -	—
bgs., c.l., works	ton.	33.50 -	—
99.3% KCL, bulk, c.l., works.	ton.	27.00 -	—
bgs., c.l., works	ton.	31.50 -	—
USP, cryst., dms.	lb.	.20 -	.22
USP, gran., dms.	lb.	.21 -	.23
USP, powd., dms.	lb.	.24 -	.26
Potassium chloride, agricultural (see Potassium muriate)			
Potassium chromate, tech., dms., works	lb.	.50 -	.51
Potassium citrate, USP, gran., dms.	lb.	.43 -	—
powd., dms.	lb.	.40½-	.41½
Potassium cyanide, dms. 20,000-lb. lots or more, works	lb.	.42½-	—
dms., 2,000-19,999-lb lots, works.	lb.	.43 -	—
dms., smaller lots, works	lb.	.44 -	.44½
Potassium dichromate (see Potassium bichromate)			
Potassium ferricyanide, dms., ton lots, works	lb.	.50 -	—
dms., smaller lots, works	lb.	.65 -	—
Potassium ferrocyanide, dms., ton lots	lb.	.24½-	—
dms., smaller lots	lb.	.29 -	—
Potassium fluoborate, fib dms., c.l., works	lb.	.30 -	—
fib dms., l.c.l., works	lb.	.31 -	—
Potassium fluoride, dms. works	lb.	.37 -	.38
Potassium gluconate, dms.	lb.	1.67 -	—
Potassium guaiacol sulfonate, NF, dms	lb.	2.10 -	2.30
Potassium hydroxide, tech (see Potash caustic).			
Potassium hydroxide, USP, pellets, 100-lb dms., 1 to 100-dm. lots	lb.	.33½-	.38
Potassium hypophosphite, NF, fib. dms., 1,000-lb. lots	lb.	1.38 -	—
Potassium iodide, USP, cryst., or gran., fib. dms	lb.	1.40 -	—
Potassium manure salt, 22% K_2O, bulk, c.l., works unit-ton.		.17 -	.1768
Potassium metabisulfite, gran., dms.	lb.	.16 -	—
Powd., dms.	lb.	.27 -	—
Potassium muriate, standard, bulk, c.l., works unit-ton.		.34½-	.36½
bagged, 60% minimum K_2O, same basis ton.		25.60	-27.80
Gran., bulk, c.l., works unit-ton.		.35 -	.37
bagged, 60% minimum K_2O, same basis ton.		25.90	-27.10
Inside prices apply to material contracted for prior to July 1, 1958.			
Outside prices apply to material contracted for after that date but also for delivery during the current month.			
Potassium nitrate, NF, cryst., bbls., 20-ton lots 100 lbs.		17.00	- —
bbls., smaller lots 100 lbs.		18.00	-19.00
NF, gran., bgs., 20-ton lots. 100 lbs.		9.50	- —
bgs., smaller lots 100 lbs.		11.00	-12.00
NF, powd., bgs., 20-ton lots. 100 lbs.		10.50	- —
bgs., smaller lots 100 lbs.		12.00	-13.00
Potassium oxalate, neutral, tech., fine gran., bbls., dms	lb.	.32 -	.34
Potassium pentaborate, gran., dms., c.l., works ton.		219.50 -	—
dms., ton lots, ex whse. ton.		311.00 -	—
dms., smaller lots, ex whse ton.		316.00 -	—
Powdered potassium pentaborate $10 per ton higher.			
Potassium perchlorate, dms., c.l., works	lb.	.18½-	—
dms., l.c.l., works	lb.	.19 -	.20
Potassium permanganate, coml., kgs., works	lb.	.26 -	.29
USP, dms., works	lb.	.29¼-	.31
Potassium persulfate, dms., c.l., works	lb.	.17½-	—
dms., l.c.l., works	lb.	.18 -	.21
Potassium pyrophosphate, tetrabasic, dms., works	lb.	.15½-	.18½
Potassium prussiate red (see Potassium ferrocyanide).			
Potassium prussiate yellow (see Potassium ferro-cyanide).			
Potassium silicate, electrical grade, 30° Be, 1:2.0, dms., c.l., works 100 lbs.		6.50 -	—
dms., l.c.l., 5 dm. lots or more, works 100 lbs.		7.25 -	7.65
tanks, works 100 lbs.		6.15 -	—
40.5° Be, 1:2.1, dms., c.l., works. 100 lbs.		5.95 -	—
dms., l.c.l., 5 dm. lots or more works 100 lbs.		6.70 -	—
tanks, works 100 lbs.		5.60 -	—
Potassium silicate, glass grade, bgs. c.l., works 100 lbs.		17.30	-18.15
bgs., l.c.l., works 100 lbs.		17.80 -	—
Potassium silicate, soln., 29° Be, 1:2.5, dms., c.l., works. 100 lbs.		4.95 -	—
dms. l.c.l., 5-dm. lots or more, works 100 lbs.		5.70 -	—
tanks, works 100 lbs.		4.60 -	—
Potassium silicofluoride, bgs., works	lb.	.09½-	.10
Potassium silicofluoride in drums, 0.4c. per lb. higher.			
Potassium stannate, dms., frt. alld. E	lb.	.789 -	.861
Potassium sulfate, agricultural, bulk, c.l., works unit-ton.		.67½-	.69¼
Inside price applies to tonnage contracted for prior to July 1, 1958.			
Outside price applies to tonnage contracted for after that date but also for delivery during the current month.			
Potassium sulfate, NF VII, cryst., dms	lb.	.31 -	.33
NF VII, gran., dms	lb.	.18½-	—
NF VII, powd., dms	lb.	.16 -	.17
Potassium sulfocyanate, NF, cryst. (see Potassium thiocyanate).			
Potassium thiocyanate, NF, cryst., dms., works	lb.	.96 -	.98
Tech., dms., works	lb.	.77 -	.79
Potassium titanate, ctns., c.l., works.	lb.	.16¼-	—
ctns., 5-ton lots, works	lb.	.16½-	—
ctns., 1-ton lots or less, works	lb.	.16¾-	—
Potassium-magnesium sulfate, basis 40%K_2SO_4 and 18% MgO, bulk, works, base price	ton.	13.45 -	—
bulk, works, July forward	ton.	14.00 -	—
Potassium-sodium tartrate, NF, gran. or powd., dms., f.o.b. works	lb.	.42½-	—
dms., 5,000-lb. lots, same basis.	lb.	.43 -	—
dms., smaller lots, same basis.	lb.	.43½-	.49
Potassium-titanium fluoride, fib. dms., works	lb.	.39 -	.40
Potassium-zirconium fluoride, fib. dms., c.l., works	lb.	.50 -	—
fib. dms., l.c.l., works	lb.	.52½-	.55
Potato starch (see Starch, potato).			
Pregnenolone, bots.	gram.	No prices	
Pregnenolone acetate, bots.	gram.	No prices	
Procaine hydrochloride, USP, dms., 1,000-lb. lots, frt. alld	lb.	2.60 -	—
dms., 100-500 lb. lots	lb.	2.95 -	3.15
Progesterone, USP, bots.	gram.	No prices.	
Progesterone acetate, bots.	gram.	No prices.	
Propane, indust., tanks, group 3	gal.	.05 -	—
tanks, Baton Rouge	gal.	.05375-	—
tanks, New York harbor (¼c. discount offered).	gal.	.1005-	—
Propenyl guaethol, dms.	lb.	24.30	-27.00
Propionic acid, syn., pure, dms., c.l., works	lb.	.23¼-	—
dms., l.c.l., works	lb.	.24¼-	—
tanks, works	lb.	.20¾-	—
n-Propyl acetate, dms., c.l., dlvd.	lb.	.14¾-	—
dms., l.c.l., dlvd.	lb.	.16¼-	—
tanks, dlvd.	lb.	.12¼-	—
n-Propyl alcohol, dms., c.l., dlvd.	lb.	.14 -	—
dms., l.c.l., dlvd.	lb.	.15½-	—
tanks, dlvd.	lb.	.11½-	—
n-Propyl gallate, dms., 100 to 2,000-lb. lots, works	lb.	3.90 -	4.40
n-Propyl-p-hydroxybenzoate, USP, dms	lb	2.30 -	2.40
Propyl thiouracil, bots., 50 kilo lots or more	kilo.	55.00 -	—
bots., smaller lots	kilo.	55.10	-55.30
n-Propylamine, dms., c.l., dlvd	lb.	1.24 -	—
dms., l.c.l., same basis	lb.	1.255 -	—
Propylene dichloride, consumers' dms., c.l., dlvd. E	lb.	.0845-	—
dms., l.c.l., same basis	lb.	.0995-	—
tanks, same basis	lb.	.07 -	—
Propylene dichloride prices in West 1c. higher, same basis.			
Propylene glycol, indust., dms., c.l., dlvd. E	lb.	.16 -	—
dms., l.c.l., same basis	lb.	.17 -	—
tanks, same basis	lb.	.13½-	—
USP, dms., c.l., dlvd. E	lb.	.18 -	—
dms., l.c.l., same basis	lb.	.19 -	—
tanks, same basis	lb.	.15½-	—
Propylene glycol methyl ether, dms., c.l., dlvd	lb.	.20 -	—
dms., l.c.l., same basis	lb.	.21 -	—
tanks, same basis	lb.	.18½-	—

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United States Steel Products Division of United States Steel

USS TRADEMARK

Styrene monomer, tech., 99.2%, dms., c.l.	lb.	.145	—
dms., l.c.l., same basis	lb.	.165	—
tanks, bulk, same basis	lb.	.12	—
Above prices are escalated for each calendar quarter on the basis of cost of crude oil at the well, cost of petroleum refining labor, and prices in the three major sections of the Wholesale Commodity Price Index.			
Styrolyl acetate, bots.	lb.	1.25	1.45
Succinic acid, purif., cryst., bbls., works	lb.	.62	.73
Sucrose, refd., white, bgs., refy. E.	lb.	.0905	—
Sucrose octa-acetate, denaturing grade, 100-200-lb. lots, bgs., l.c.l., works	lb.	1.00	—
Sugar (see Sucrose).			
Sugar cane wax, dom., refd., slabs, 80-lb. ctns., works	lb.	.65	.75
80-lb. ctns., spot	lb.	.67¼	.72¼
Sulfabenzamide, dms.	kilo.	8.80	9.90
Sulfabenzamide-sodium, dms.	kilo.	9.00	10.10
Sulfacetamide, USP, fib. dms.	kilo.	7.70	8.80
Sulfacetamide-sodium, USP, fib. dms	kilo.	8.15	9.25
Sulfadiazine, USP, microcrystals, dms	kilo.	23.35	24.45
USP, powd., dms.	kilo.	22.60	23.70
Sulfadiazine-sodium, USP, dms	kilo.	24.80	25.90
Sulfaguanidine, NF X, dms.	kilo.	5.50	6.60
Sulfamerazine, USP, microcrystals, dms	kilo.	23.50	24.60
Sulfamerazine-sodium, USP, powd., dms	kilo.	24.80	25.90
Sulfamethazine, USP XV, microcrystals, dms	kilo.	19.65	20.75
USP XV, powd., dms	kilo.	18.75	19.85
Sulfamic acid, cryst., dms., c.l., works	100 lbs.	16.00	—
dms., l.c.l., t.t.l., works	100 lbs.	17.50	18.50
100 lbs or more	lb.	6.00	—
Gran., dms. c.l., t.l., works.	100 lbs.	14.75	—
dms., l.c.l., t.t.l., works	100 lbs.	16.25	17.25
Sulfanilamide, NF X, 30-80 mesh, dms	kilo.	3.05	3.50
NF X, microcrystals, dms.	kilo.	3.79	4.20
NF X, powd., dms.	kilo.	2.85	3.30
Sulfanilamide quinoxaline, veterinary, dms	kilo.	14.12	14.85
Sulfanilic acid, tech., dms., c.l., frt. alld	lb.	.21	—
dms., l.c.l., frt. alld.	lb.	.23	—
Sulfapyridine, USP XV, powd., bots. tins	kilo.	15.45	16.55
Sulfapyridine-sodium, monohydrate, dms	kilo.	16.55	17.65
Sulfathiazole, NF X, powd., dms.	kilo.	5.50	5.85
NF X, microcrystals, dms	kilo.	6.25	6.60
Sulfathiazole-sodium, NF X, dms., 1,000-lb lots or more	lb	2.35	—
Sulfur, coml., flour, bgs., mines,	100 lbs.	2.35	—
bbls., mines	100 lbs.	3.30	—
lump, bgs., mines	100 lbs.	2.25	—
bbls., mines	100 lbs.	2.80	—
Sulfur, crude, dom., bright, bulk, f.o.b cars, mines	long-ton	23.50	—
Export, f.o.b. vessels Gulf ports	long-ton	25.00	—
US and Canada, f.o.b. vessels Gulf ports.	long-ton	25.00	—
Domestic dark sulfur prices are $1 per long-ton lower			
Sulfur, crude, bulk, imp., Mexican, filtered, f.o.b., vessel, Coatzacoalcos	long-ton	24.00	—
Mexican dark sulfur price is $1 per long-ton lower.			
Sulfur, refd., flowers, NF, bgs., mines	100 lbs.	5.15	—
bbls., mines	100 lbs.	6.50	—
flour, light, bgs., mines	100 lbs.	4.75	—
bbls., mines	100 lbs.	5.75	—
lump bgs., mines	100 lbs.	5.00	—
rolls, bgs., mines	100 lbs.	5.00	—
bbls., mines	100 lbs.	5.75	—
salt block, bgs., mines	100 lbs.	4.65	—
virgin block, bbls., mines	100 lbs.	4.70	—
Sulfur, rubbermakers, coml., reg., bgs., mines	100 lbs.	2.45	—
bbls., mines	100 lbs.	3.70	—
98-100%, passing through 325 mesh, bgs., mines	100 lbs.	2.55	—
bbls., mines	100 lbs.	3.80	—
refd., bgs., mines	100 lbs.	4.40	—
bbls., mines	100 lbs.	5.55	—
treated, 2.5% mineral oil, bgs., mines	100 lbs.	2.75	—
bbls., mines	100 lbs.	4.00	—
Sulfur dichloride, ret. dms. c.l., works, frt. equald	lb.	.04½	—
ret. dms., l.c.l., same basis	lb.	.05¼	—
tanks, same basis	lb.	.04	—
Sulfur dioxide, liq., coml., cyls., works, frt. equald	lb.	.10	.12
multi-unit cars, works	lb.	.0535	—
tanks, works	lb.	.045	—
Refrigeration, 150-lb. cyls., divd.	lb.	.33	—
Sulfur monochloride, 55-gal. non-ret. dms., c.l., frt. equald	lb.	.04½	—
dms., l.c.l., same basis	lb.	.05¼	—
tanks, same basis	lb.	.04	—
Sulfuric acid, 60° Be, cbys., c.l., works	100 lbs.	2.00	—
cbys., l.c.l., works	100 lbs.	2.30	—
tanks, works	ton.	18.60	—
66° Be, cbys., c.l., works	100 lbs.	2.25	—
cbys., l.c.l., works	100 lbs.	2.55	3.35
tanks, works	ton.	22.35	—
98%, tanks, works	ton.	23.50	—
99-100%, tanks, works	ton.	23.95	—
Sulfuric acid, CP, NF, consumers' cbys., c.l., frt. equald	lb.	.12¾	—
consumers' cbys., l.c.l., same basis	lb.	.14¼	.14¾
5-pt. bots., extra, cs., c.l., works, frt. alld	lb.	.16¼	—
5-pt. bots., extra, cs., l.c.l., same basis	lb.	.17¾	.18¾
Sulfuric acid, fuming (oleum), 20%, tanks, works	ton.	25.00	—
40%, tanks, works	ton.	29.00	—
65%, tanks, works	ton.	39.50	—
Superphosphate, run-of-pile, under 22% a.p.a., pulv., bulk., c.l., Baltimore	unit-ton.	.90	.93
bulk, c.l., Carteret, N. J.	unit-ton.	.90	.93
bulk, t.o.b vessel	unit-ton.	1.02	—
Superphosphate, triple, 48% or more a.p.a., pulv., bulk, c.l., East Tampa, Fla	unit-ton.	.98	—
Sweet birch oil, USP, northern, ens	lb.	4.00	9.50
USP, southern, ens.	lb.	2.00	3.05

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2,4,5-T, dms., c.l. works frt. equald,	lb.	1.18	—
dms, l.c.l., same basis	lb.	1.25	—
2,4,5-T isopropyl ester, dms., c.l., works, frt equald	lb.	1.24	—
dms., l.c.l., works	lb	1.29	—
Talc, dom. fibrous New York, grd., bgs., c.l., works	ton.	28.00	—
bgs., l.c.l., works	ton.	31.00	36.00
fibrous, New York, 99.5%, 325 mesh bgs. c.l., works.	ton.	31.00	—
bgs., l.c.l., works	ton.	34.00	—
Talc, dom., fibrous, 99.93% micronized, bgs., works	ton.	38.00	—
ord., Calif., gran., bgs., c.l., works	ton.	34.00	39.50
Vermont, off-color, grd., bgs., c.l., works	ton.	19.40	—
bgs., l.c.l., works	ton.	37.00	—
Imp., Canadian, grd., bgs., c.l., mines	ton.	20.00	35.00
Tall oil, crude, dms., c.l., works	lb.	.04¼	.04½
tanks, works	lb.	.02¾	.03
Dist., dms., c.l., works	lb.	.07¾	—
dms., l.c.l., works	lb.	.08	.08½
tanks, works	lb.	.06	.06½
Refd., dms., c.l., works	lb.	.06¾	—
dms., l.c.l., works	lb.	.07	.07½
tanks, works	lb.	.05½	.06
Tall oil acids, dms., c.l., works	lb.	.10½	.12
dms., l.c.l.	lb.	.11	.12½
tanks, works	lb.	.08½	.10
Tallow, edible, tanks, dlvd	lb.	.09½	.09¼
Inedible, fancy, bleachable, tanks, dlvd	lb.	.07¼	.07⅝
fancy, guaranteed, dms., f.a.s.	lb.	.08⅝	—
No. 1, tanks, dlvd.	lb.	.06¾	.06⅞
prime, tanks, dlvd	lb.	.07⅛	.07¼
special tanks, dlvd	lb.	.07	.07⅛
sulfonated 25% bbls., l.c.l.	lb.	.03⅝	.08⅞
50%, bbls., l.c.l.	lb.	.10½	.11
Tallow acids, dist., dms	lb.	.14¼	.16¾
tanks	lb.	.11¾	—
Hydrogenated, dms.	lb.	.15¾	.18¼
Tallow oil, acidless, dms., c.l.	lb	14½	—
dms., l.c.l.	lb.	15½	.17
Tangerine oil, Florida, dms.	lb.	3.10	4.00
Tankage, animal, feeding, 9-11% ammonia, New York bulk	unit-ton.	6.50	—
Animal, feeding, 9-11% ammonia, Chicago, bulk	unit-ton.	7.00	—
Tannic acid, NF fluffy bbls. 1,000-lb lots	lb	2.05	—
bbls. smaller lots	lb	2.06	2.10
NF, powd., bbls., 1,000-lb. lots	lb.	1.95	—
bbls. smaller lots	lb.	1.96	2.01
Tech., dms.	lb.	1.05	—
Tansy oil, dms.	lb	7.50	9.50
Tar acid oil, 15-18% dms., c.l., frt. equald	gal.	.53½	—
dms., l.c.l., same basis	gal.	.55½	—
tanks, same basis	gal.	.43½	—
25-28%, dms., c.l., same basis	gal.	.60	—
dms., l.c.l., same basis	gal	.62	—
tanks, same basis	gal	.50	—
50-53%, dms., c.l., same basis	gal.	.75	—
dms., l.c.l., same basis	gal.	.77	—
tanks, same basis	gal.	.65	—
Tar, coal (see Coaltar).			
Tartar emetic (see Antimony potassium tartrate)			
Tartaric acid, dom., NF 230 or 250-lb. dms., c.l	lb.	.49	—
230 or 250-lb dms. 10,000-lb. lots, 1 shipt	lb.	.49½	—
230 or 250-lb. dms., smaller lots	lb.	.50	—
100-lb dms	lb.	.51	—
Imp., NF, bgs., dms., kgs.	lb.	.40	.41
Terpine hydrate, NF, cryst., powd., 100-lb fib. dms	lb.	.70	—
Terpineol, extra, dms.	lb.	.50	.60
Prime, dms.	lb.	.40	.50
Terpinyl acetate, extra, cns., dms.	lb.	.64	.75
Prime, dms.	lb.	.53	.56
Terpinyl propionate dms	lb	1.75	3.00
Terra alba (see Gypsum)			
Testosterone, USP, bots	gram	No prices.	
Testosterone proprionate USP.	gram	No prices.	
Tetrachloroethane, dms. works	lb	14½	—
Tetrasodium pyrophosphate (see Sodium pyrophosphate)			
Tetrachloroethylene tech (see Perchloroethylene)			
Tetrachloroethylene, USP, 55-gal. dms., c.l., t.l. works	lb.	20½	—
dms., l.c.l. works	lb	.22	.23¼
Tetraethyl orthosilicate dms., c.l., dlvd E	lb.	.60	—
dms., l.c.l., dlvd. E.	lb.	.61½	—
Tetraethyl pyrophosphate, 40%, cns., dms., frt equald	lb.	.75	—
Tetraethylenepentamine dms., c.l., dlvd E	lb.	53½	—
dms., l.c.l., dlvd. E.	lb.	.55	—
tanks, dlvd E.	lb.	.51	—
Tetraethylthiuram disulfide, tech., dms., frt alld	lb.	1.04	—
Tetrahydrofuran, dms. c.l., t.l., works	lb	36½	—
dms., l.c.l., or t.t.l., works	lb.	37	—
tanks, works	lb.	35	—
Tetrahydrofurfuryl alcohol, dms., c.l., t.l., Memphis, Tenn.	lb.	.31½	—
dms., l.c.l., Memphis, Tenn	lb.	.32½	—
dms., c.l., t.l., Newark, N.J.	lb.	.33½	—
dms., l.c.l., Newark, N.J	lb.	.34½	—
tanks, dlvd. E. of Denver	lb.	.31	—
tanks, dlvd. W. of Denver	lb.	.32	—

THORIUM, RARE EARTH and YTTRIUM

Chemicals and Metals

RARE EARTH SALTS

from our general production process, supplied as oxides, fluorides, chlorides and other compounds

GADOLINIUM SALTS
NEODYMIUM SALTS
YTTRIUM CONCENTRATES
BARNESITE—Special Rare Earth Oxide lens-polishing agent
SAMARIUM-GADOLINIUM CONCENTRATES
RARE EARTH SALTS, technical
CEROX—(Optical Grade Cerium Oxide) for glass and granite polishing
SAMARIUM SALTS
THORIUM SALTS
CERIUM SALTS
DIDYMIUM SALTS—(All the Rare Earths except Cerium)

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SALTS OF HIGHLY PURIFIED RARE EARTHS

most of which are produced by the Ion Exchange process

YTTRIUM	PRASEODYMIUM	EUROPIUM	DYSPROSIUM	THULIUM
LANTHANUM	NEODYMIUM	GADOLINIUM	HOLMIUM	YTTERBIUM
CERIUM	SAMARIUM	TERBIUM	ERBIUM	LUTETIUM

HIGH PURITY RARE EARTH METALS

YTTRIUM	CERIUM	NEODYMIUM	EUROPIUM	TERBIUM	HOLMIUM
LANTHANUM	PRASEODYMIUM	SAMARIUM	GADOLINIUM	DYSPROSIUM	ERBIUM
	THULIUM	YTTERBIUM	LUTETIUM	THORIUM	

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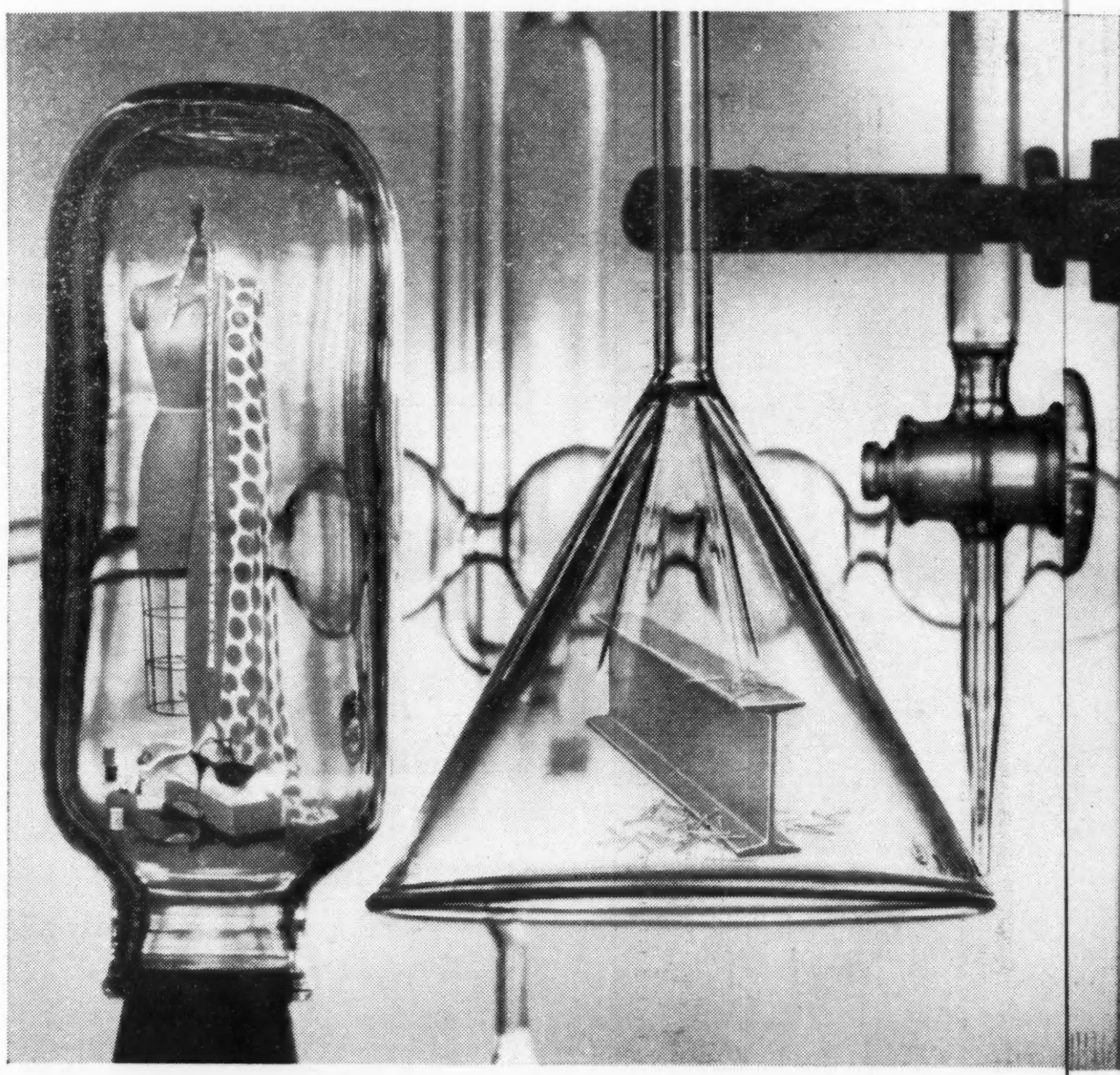
Tetrapotassium phosphate (see potassium phosphate).			
Thallium metal, dlvd.	lb	7.50	-10.00
Thallium sulfate, 99% bots., dlvd.	lb	5.00	-10.00
Theobromine, NF, fib dms	lb	4.50	—
Theobromine and sodium acetate, USP, fib dms	lb	4.75	—
Theobromine sodio-salicylate, NF, fib dms	lb	3.90	—
Theophyline, anhyd or USP 100-lb dms	lb	3.65	—
Thiamine hydrochloride, USP, reg., fib dms	kilo	36.00	—
USP, ampule grade, fib, dms.	kilo	38.00	—
Thiamine mononitrate, USP, fib. dms	kilo	36.00	—
Thiocarbanilide, dms., ton lots	lb	72	—
dms., less ton lots	lb	74	—
Thiodiphenylamine (see Phenothiazine).			
Thioflavin green toner, brilliant, molybdated, PMA, bgs., works	lb	5.20	—
Tungstated, PTMA, kgs., works.	lb	6.20	—
Thioglycolic acid, refd., cbys., 100% basis	lb	1.35	1.55
Thiosalicylic acid, purif., dms., 1,000-lb., lots, works	lb	4.00	—
Thiourea, tech., bgs., t.l., frt alld.	lb	.30	—
bgs., ton lots, same basis	lb	.32	—
bgs., less than ton lots, same basis	lb	.33	—
Thorium nitrate, purif., fib dms., 100-lb lots or more works	lb	3.50	—
dl-Threonine, bots., 1-kilo lots	kilo	275.00	—
Thyme leaves, French, bgs	lb.	.30	—
Spanish, bgs.	lb.	.14	—
Thyme oil, NF red, cns., dms	lb	2.00	2.25
USP, white, cns.	lb	2.20	2.60
Tech., white, cns	lb	40	1.85
Thymol, fib dms.	lb	2.60	3.00
Thymol iodide, NF, dms.	lb	7.30	—
Timbo root (see Cube root).			
Tin chloride (see Stannous chloride, anhyd.)			
Tin crystals (see Stannous chloride, hydrous)			
Tin metal (straits)	lb.	1.02⅝	—
Tin oxide (see Stannic oxide)			
Tin sulfate (see Stannous sulfate).			
Tin tetrachloride anhyd (see Stannic chloride anhyd.).			
Titanium dioxide, anatase, ceramic, bgs., c.l., dlvd	lb.	.25½	—
bgs., t.c.l., dlvd	lb.	.26½	—
reg., bgs., c.l., dlvd	lb.	.25½	—
bgs., t.c.l., dlvd	lb	26½	—
Titanium dioxide, anatase, metallurgical, nat., bgs., c.l., f.o.b. Jacksonville Fla	ton.	180.00	—
bgs., 5-ton lots Niagara Falls, N Y	ton.	205.00	—
bgs., ton lots, same basis	ton.	215.00	—
Milled metallurgical titanium dioxide $7.50 per ton higher.			
Titanium dioxide, rutile, non-chalking, bgs., c.l., dlvd, E	lb.	.27½	—
bgs., t.c.l., dlvd, E	lb.	28½	—
Titanium dioxide-calcium pigment, 30% Ti O2, reg., bgs., c.l., dlvd	lb.	.09⅜	—
bgs., t.c.l., works	lb.	.09⅜	—
Titanium dioxide-calcium pigment, 50% Ti O2, high-tinting, dms. c.l.	lb.	.14⅜	—
dms., t.c.l.	lb.	.14⅜	—
Titanium hydride, powder, dms., works	lb	8.10	9.00
Titanium tetrachloride, tech., dms., c.l., works	lb.	.26	—
dms., t.c.l., works	lb.	.27½	.29
tanks, works	lb.	.20	—
Tobias acid, dms., c.l., t.l.	lb.	.78	—
dms., t.c.l.	lb.	.81	—
d-a-Tocopherols, mixed, NF, conc., pure basis, bots	kilo.	67.00	—
d-a-Tocopheryl acetate, NF, conc., pure basis, bots	kilo.	122.00	—
d-a-Tocopheryl acid succinate, cryst., bots	kilo.	109.00	—
dl-a-Tocopherol, bots	kilo.	99.00	—
dl-a-Tocopheryl acetate, bots.	kilo.	90.00	—
25% dry, powd., bots.	kilo.	22.50	-24.00
33⅓% dry, powd., bots.	kilo.	30.00	-31.50
o-Tolidine base, dry, kgs., 100% basis	lb	1.55	—
Paste, kgs., 100% basis	lb.	1.50	—

Toluol

Toluol quotations, both coaltar and petroleum, may be found under Toluene.

o-Tolidine hydrochloride, paste, kgs., 100% basis	lb.	1.50	—
Tolu balsam, cns.	lb.	2.75	3.75
Toluene coaltar indust., or nitration, tanks, dlvd E of Rockies	gal.	.25	—
Toluene petroleum, indust., tanks, dlvd E. of Rockies	gal.	.25	.32
p-Toluenesulfonamide, powd., dms., t.l., works	lb.	.60	—
dms., t.t.l., same basis	lb.	.63	—
Toluenesulfonic acid, dms., c.l., t.l. works	lb.	.17	—
dms., t.c.l. works	lb.	.18	—
p-Toluenesulfonic acid monohydrate, dms., c.l. or t.l. to.	lb.	.90	—
dms., 125 lbs. to t.l.	lb.	1.00	—
m-Toluidine, dms., c.l., works, frt. alld	lb.	.79	—
dms., t.c.l., same basis	lb.	.80	—
tanks, same basis	lb.	.78	—
o-Toluidine, dms., c.l., works, frt. alld	lb.	.30	—
dms., t.c.l., same basis	lb.	.31	—
tanks, same basis	lb.	.28	—
p-Toluidine, tech., flake, dms., frt. alld	lb.	.50	—
Cast, dms frt. alld	lb.	.45	—
p-Toluidine-m-sulfonic acid, dms., works	lb.	.92	1.04
Toluidine red toner, deep shades, kgs., works	lb	1.70	—
Light shades, kgs., works	lb.	1.70	—
2,4-Tolylenediamine, cryst., fib, dms., t.c.l., frt. alld	lb	1.10	—
Tonka beans, Angostura, cks.	lb.	1.50	1.60
Brazilian, Surinam, cs.	lb.	1.25	1.30
Totaquine 100-oz. lots, cns.	oz.	.42	—
Toxaphene, dms., c.l., t.l., works	lb	.22	—
dms., t.c.l., t.t.l., works	lb	.28	—
Trag canth gum, No. 1, ribbons, cs	lb.	3.75	4.00
No. 2, cs.	lb.	3.60	3.80
No. 3, cs.	lb.	3.15	3.25
USP, powd., bbls.	lb.	1.05	1.15
Triacetin, dms., c.l., dlvd, E of Rockies	lb.	.39	—
dms., t.c.l., same basis	lb	.40	—
tanks, same basis	lb	.37	—
Triallylamine, dms., c.l., dlvd.	lb	.985	—
dms., t.c.l., dlvd.	lb	.995	—
tanks, dlvd.	lb.	.96	—
Tributyl citrate, tech., non-ret, dms., c.l., frt alld E of Denver	lb.	.42½	—
non-ret dms., t.c.l., frt. alld, E. of Denver	lb	.43½	—
tanks, frt. alld E of Denver	lb.	.40	—
Tributyl phosphate, dms, c.l., works.	lb.	.52½	—
dms., t.c.l., same basis	lb.	.53½	—
tanks, same basis	lb.	.50	—
Tributylamine dms, c.l., works	lb	.67½	—
dms., t.c.l., same basis	lb.	.69	—
tanks, same basis	lb	.65	—
Trichloroacetic acid, bots.	lb.	2.00	2.50
Trichlorobenzene, dms., c.l., frt. alld, E	lb.	.15	—
dms., t.c.l., frt. alld E.	lb.	.16	—
tanks, frt. alld E.	lb.	.13¼	—
Trichlorobenzene prices in the West 1¾c. higher.			
1,1,1-Trichloroethane, dms., c.l., dlvd.	lb.	.13¼	—
dms., t.c.l., dlvd.	lb.	.16¼	—
tanks, dlvd.	lb.	.12¼	—
1,1,2-Trichloroethane, dms., c.l., works	lb.	.13½	—
dms., t.c.l., dlvd. E.	lb.	.14¼	—
tanks, works	lb.	.11½	—
Trichloroethylene, dms., c.l., or t.l., works, frt. equald	lb.	.13	—
dms., t.c.l., frt. alld.	lb.	.15	.16¾
tanks, works, frt. equald.	lb.	.12	—
Trichlorophenoxyacetic acid (see 2,4,5-T).			
Tricholine citrate, 65% soln., ret, cbys., works, frt adjusted.	lb.	1.40	1.45
Tricresyl phosphate, coaltar, dms., c.l., dlvd	lb.	.35	—
dms., t.c.l., dlvd.	lb.	.36	—
tanks, dlvd.	lb.	.32½	—
Tricresyl phosphate, petroleum, dms., c.l., dlvd.	lb.	.34½	—
dms., t.c.l., dlvd.	lb.	.35½	—
tanks, dlvd.	lb.	.32½	—
Tridecyl alcohol, mixed isomers, dms., c.l., dlvd, E	lb.	.26½	—
dms., t.c.l., dlvd, E	lb.	.28	—
tanks, dlvd, E	lb.	.24	—
Triethanolamine, dms, c.l., dlvd E.	lb.	.24½	—
dms., t.c.l., same basis	lb.	.25½	—
tanks, same basis	lb.	.22	—
Triethanolamine lauryl sulfate, dms., c.l., t.l., frt. alld	lb.	.25½	—
dms., t.t.l., frt. alld.	lb.	.26½	—
tanks, frt. alld	lb.	.24½	—
Triethylamine, dms., c.l., dlvd E.	lb.	.50	—
dms., t.c.l., same basis	lb.	.51½	—
tanks, same basis	lb.	.47½	—
Triethyl citrate, refd., tech., non-ret dms., c.l., frt alld E. of Denver	lb.	.46¼	—
non-ret. dms., t.c.l., frt. alld. E of Denver	lb.	.47¼	—
tanks, frt. alld. E. of Denver	lb.	.43¾	—
Triethyl phosphate, dms., c.l., dlvd.	lb.	.40¼	—
dms., t.c.l., dlvd.	lb.	.41½	—
tanks, dlvd.	lb.	.38	—
Triethylene glycol, dms., c.l., dlvd, E	lb.	.21	—
dms., t.c.l., dlvd, E.	lb.	.22½	—
tanks, same basis	lb.	.18½	—
Triethylenetetramine, dms., c.l., dlvd, E	lb.	.51½	—
dms., t.c.l., dlvd, E.	lb.	.53	—
tanks, dlvd E.	lb.	.49	—
Tri-isopropanolamine, dms., c.l., dlvd, E	lb.	.23¼	—
dms., t.c.l., dlvd, E.	lb.	.24¾	—
tanks, dlvd, E.	lb.	.20¾	—
Trimethylamine, anhyd., cyls., t.c.l., frt. equald, 100% basis	lb.	.30	.305
tanks, same basis	lb.	.26	—
25-40% soln., dms., c.l., works, frt. equald, 100% basis	lb.	.35	—
dms., t.c.l., works, frt. equald., 100% basis	lb.	.35½	—
tanks, works, frt. equald, 100% basis	lb.	.26	—
Trioxane, pure, dms., c.l., t.l., works.	lb.	.50	—
dms., t.c.l., works	lb.	.51½	—
Tripentaerythritol, c.l., t.l., dlvd, E.	lb.	.40	—
bgs., t.c.l., t.t.l., dlvd, E.	lb.	.41	—
Triphenyl phosphate, bbls., c.l., frt equald	lb.	.41½	—
bbls., t.c.l., frt. equald	lb.	.43½	—
Triphenylguanidine, bbls., works.	lb.	.90	—
Tripropylene glycol, dms., c.l., t.l., frt. alld, E	lb.	.21	—
dms., t.c.l., t.t.l., frt. alld, E	lb.	.22	—
tankcars and compartmented tankcars, frt. alld, E	lb.	.18½	—



COLUMBIA-SOUTHERN CHEMICALS ANSWER

LOWER COSTS, BETTER PROFITS . . . however you analyze it, dollars saved in processing show up clearly on the balance sheet. That's the big reason you look so closely at the total "package" you get when you buy such essential materials as chemicals.

Product purity? Meeting or exceeding your tightest specifications, shipment after shipment. Dependability of supply? Delivery from plants or terminals meshed exactly to your schedules. Geared to your handling and use? Widest range of forms, concentrations, land or water shipment. And vitally important . . . ideas and technical help? Instantly available through every district office, or direct from Pittsburgh: experienced, practical specialists with a keen eye to the economics of your specific operation. All this, from whom? Why, of course:

Columbia-Southern Chemical Corporation, One Gateway Center, Pittsburgh 22, Pennsylvania. Offices in fourteen principal cities. In Canada: Standard Chemical Limited.

Tripropylene glycol, tankwagons and compartmented tankwagons, 1,000 gals. min., frt. alld. E. lb. .19 • —
Tripropylene glycol prices 1c. per lb. higher in West.
Trisodium phosphate (see Sodium phosphate tribasic).
dl-Tryptophane, fib., dms., works. lb. 55.00 • —
Tung oil, dms., c.l., New York lb. .24½- —
dms., l.c.l., New York lb. .24¾- .25
tanks, New York lb. .23 • —
tanks, domestic mills lb. .22 • —
Tungsten metal, powd., 2.0-2.5 microns, dms., works lb. 3.54 • —
Tungstic acid, tech., dms., 1,000-lb. lots, works lb. 2.25 • —
dms., smaller lots, works lb. 2.45 • —
Turkey red, bbls., works lb. .62 • —
Turpentine, gum (see Protective Coatings market, Naval Stores).
Turpentine oil, NF, cns., dms lb. .28 • .50
Tuscan red, bbls., frt. equald. lb. .26 • .32
Tyrothricin, USP, 1 to 5 kilos gram. .54 • —

U

Ultramarine blue, cobalt type, dry or pulp, 250-lb. bbls., dlvd. E. of Rockies lb. .35 • .39½
Ultramarine blue, jobbing types, bbls., same basis lb. .19 • —
Regular types, dry bbls., same basis lb. .22½- .35
Ultramarine blue prices 1c. higher W. of Rockies.
Umber pigment, burnt, American, bgs., c.l., works lb. .07½- .07¾
bgs., l.c.l., works lb. .07¾- .08
Turkey-type, bgs., c.l., Boston, Bethlehem, Easton, Pa., Hiwassee, Va., N. Y. lb. .08¼- —
Umber pigment, raw, American, bgs., works lb. .07¾- .08¼
Turkey-type, bgs., works lb. .08½- .08¾
Undecylenic acid, dms. lb. 1.45 • —
Unicorn root, false (see Helonias root).
Unicorn root, true (see Aletris root).
Urea, 46% N, indust., bgs., c.l., t.l., dlvd. E. ton. 125.00 • —
bgs., l.c.l., dlvd. E. ex whse. ton. 145.00 • —
45% N, agricultural, bgs., c.l., (30 tons) dlvd. E. ton. 103.00 • —
Urea-ammonia liquor, A, B, C & F grades, N basis, tanks, frt. equal ton. 120.00 • —
37 grade, tanks, same basis ton. 145.00 • —
Urethane, USP, dms., t.l., f.o.b., works lb. .65 • —
dms., l.t.l., same basis lb. .70 • —
Uva-ursi leaves, bls. lb. .17 • .19

V

Valerian root, Belgian, bgs. lb. .35 • —
Indian, bgs. lb. .29 • —
dl-Valine, dms., works lb. 21.00 • 27.50
Vanadium pentoxide, tech., dms., works lb. 1.28 • 1.33
Vandyke brown, bbls., works lb. .09½- .12
Vanilla beans, Bourbon, tins lb. 12.00 -12.50
Mexican, cuts, tins lb. 11.25 -11.75
whole, tins lb. 12.00 -12.50
Vanillin, ex lignin, 100-lb fib. dms., 1,000-lb. lots or more lb. 3.00 • —
100-lb fib. dms., 500-lb. lots lb. 3.10 • —
100-lb. fib. dms., cns., 100-lb. lots lb. 3.25 • 3.35
Venetian red, jobbing, bgs., works. lb. .0475- —
20%, bgs., works lb. .0525- —
25%, bgs., works lb. .0575- —
30%, bgs., works lb. .06 • —
Venetian red, 35%, bgs., works lb. .0625- —
40%, bgs., works lb. .0675- —
Vetiver oil, Bourbon, cns. lb. 12.00 -14.50
Haitian, cns. lb. 11.50 -13.50
Victoria blue toner, molybdated, PMA, 250-lb. bbls., dlvd. E. of Rockies lb. 4.50 • —
Tungstated, PTA, 250-lb. bbls., dlvd. E. of Rockies lb. 5.55 • —
Victoria blue toner, bbls., prices 1c. higher W. of Rockies.
Vinyl acetate monomer, zone 1, 55-gal. dms., c.l., dlvd lb. .20 • —
55-gal. dms., l.c.l., dlvd. lb. .21½- —
tanks, dlvd. lb. .17½- —
tanktrucks less than 4,000 gal., dlvd lb. .18 • —
zone 2, 55-gal. dms., c.l., dlvd lb. .21 • —
55-gal. dms., l.c.l., dlvd. lb. .24 • —
tanks, dlvd. lb. .18½- —
tanktrucks, less than 4,000 gals., dlvd lb. .19 • —
zone 1 is all continental US except zone 2. zone 2 comprises Ariz., Calif., Idaho, Mont., Nev., Ore., Utah and Wash.
Vinyl n-butyl ether, tech., dms., l.c.l., works lb. .50 • —
Vinyl chloride monomer, tanks, works lb. .12½- —
Vinyl ether, tech., dms., c.l., works. lb. .26 • —
dms., l.c.l., works lb. .28 • —
tanks, works lb. .25 • —
Vinyl ether, USP, anesthesia, bots., 50cc., hospitals bot. 1.12 • —
bots., 75cc., hospitals bot. 1.56 • —
Vinyl ethyl ether, tech., dms., c.l., works lb. .29¼- —
dms., l.c.l., works lb. .30 • —
tanks, works lb. .27¼- —
Vinyl methyl ether, cyls., works lb. .30 • —
Cylinders are sold outright, or if shipped against deposit, a free period of sixty days is allowed; and if empties are returned prepaid and in good condition within that period full refund is made.
Vinyl propionate monomer, dms., c.l., dlvd lb. .49 • —
dms., l.c.l., same basis lb. .50 • —
tanks, same basis lb. .47 • —
Vinyl trichloride (see Trichloroethane).
2-Vinylpyridine, 10 dms. to tanks, works lb. 1.20 • —
1 to 9 dms., works lb. 1.35 • —
tanks, works lb. 1.15 • —
Vinyltoluene, dms., c.l., f.o.b., works. lb. .16½- —
dms., l.c.l., same basis lb. .18½- —
tanks, f.o.b., dest., frt. prepaid lb. .14 • —
Viosterol, in nat. vegetable oil, 1,000,000 D units per gram, bots., lots of 10 billion USP units 1,000,000 units. .02¼- —
Virginia type red, bbls., works lb. 1.40 • —
Vitamin A acetate, syn., cryst., beads, 500,000 A units per gram gram. .07¼- —
dry, 500,000 units per gram, kilo lots kilo. 67.50 • —
325,000 units per gram, same basis kilo. 43.88 • —
250,000 units per gram, same basis kilo. 33.75 • —
Dry vitamin A acetate in less than kilo lots, $2.50 per kilo higher in all potencies.
Vitamin A, liq. in oil, 1,000,000 A units per gram, 1,000,000 units .10 • —
Vitamin A palmitate, liq., 1,000,000-1,800,000 A units per gram 1,000,000 units. .10 • —
Vitamin A palmitate, liq. in oil, 1,000,000 A units per gram. 1,000,000 units. .10 • —
Vitamin B_1 (see Thiamine hydrochloride).
Vitamin B_2 (see Riboflavin and Yeast).
Vitamin B_{12}, cryst., USP, 1-50 grams, vials, tins gram. 139.00 • —
1% vitamin B_{12}, adsorbed on resin, 100 and 500-gram bots., 1-5 kilo dms gram. 1.65 • —
Vitamin B_{12}, oral grade solids, in containers of 1 and 10 gram of B_{12} activity. gram. 128.00 • —
0.1 percent trituration of cryst. B_{12} with dicalcium phosphate or mannitol, 1-10 kilo. kilo. 160.00 • —
Vitamin B_{12}, 1% vitamin B_{12}, oral grade solids, adsorbed on resin, 100 and 500-gram bots., 1-5 kilo dms gram. 1.33 • —
Vitamin C (see Ascorbic acid).
Vitamin D (see Codliver and Fish-liver oils, Calciferol and Viosterol).
Vitamin D_2, dry, 850,000 units per gram, kilo lots kilo 42.50 • —
850,000 units per gram, less than kilo lots kilo 45.00 • —
Vitamin E (see a-Tocopherol and Wheat germ oil).
Vitamin G (see Riboflavin).
Vitamin H (see Biotin).
Vitamin K, active (see Menadione).
Vitamin K_1, 25 gram bots gram. 4.50 • —
Violet methyl toner (see Methyl violet toner).
VM&P naphtha (see Naphtha, VM&P, petroleum).

W

Wahoo root bark, bls. lb. 2.10 • —
Warfarin, 0.5%, dms., 50-lb. lots, dlvd lb. 1.95 • —
dms., 25-49-lb. lots, New York or Chicago lb. 2.05 • —
dms., 5-24-lb. lots, New York or Chicago lb. 2.15 • —
Watchung-type reds, bbls. lb. 1.95 • —

Waxes

Wax quotations are listed individually. For example, prices on Wax carnauba, may be found in the C's under Carnauba wax.

Wheat germ oil, 5-gal. dms gal. 12.25 —
Wheat starch (see Starch, wheat).
White lead (see Lead, white).
White mineral oil (see Mineral oil, white).
White pine bark, rossed, bls lb. .18 • .19
White precipitate, USP, powd., dms., lb. 6.55 • —
Whiting (see Calcium carbonate).
Wild cherry bark, thin, nat., bls lb .18 • —
Thin, rossed, bls. lb. .21 • —
Wintergreen oil, USP, nat., northern, cns lb 6.35 -17.50
USP, nat., southern, cns lb 3.75 7.00
Wintergreen oil, syn. (see Methyl salicylate).
Witch hazel bark, bls. lb .16 .17
Witch hazel leaves, bls. lb .22 • —
Wollastonite, fine, bgs., c.l., works. ton. 39.50 • —
bgs., l.c.l., ex whse. ton. 56.00 • —
Medium, bgs., c.l., works ton. 27.00 • —
bgs., l.c.l., ex whse. ton. 44.00 • —
Wood alcohol (see Methanol).
Wood oil (see Tung oil).
Woolfat, crude (see Degras).
Woolfat, USP (see Lanolin).
Wormseed, Levant, bgs. lb 4.25 4.50
Wormseed oil (see Chenopodium oil, NF).
Wormwood oil, cns. lb 4.90 5.85

X

Xylene, coaltar, indust., tanks, works:
Bethlehem, Pa. gal. .29 • —
Birmingham dist. gal. .29 • —
Chicago dist. gal. .28½- —
Cleveland dist. gal. .29 • —
Geneva, Utah gal. .29 • —
Johnstown, Pa. gal. .29 • —
Lackawanna, N. Y gal. .29½- —
Lone Star, Tex. gal. .27 • —
Lorain, Ohio gal. .29 • —
Middletown, Ohio gal. .30 • —
Minnequa, Col. gal. .29 • —
Philadelphia dist. gal. .29 • —
Pittsburgh dist. gal. .29 • —
Sparrows Point, Md. gal .29 • —
Terre Haute, Ind. gal. .29 • —
Youngstown, Ohio gal. .29 • —

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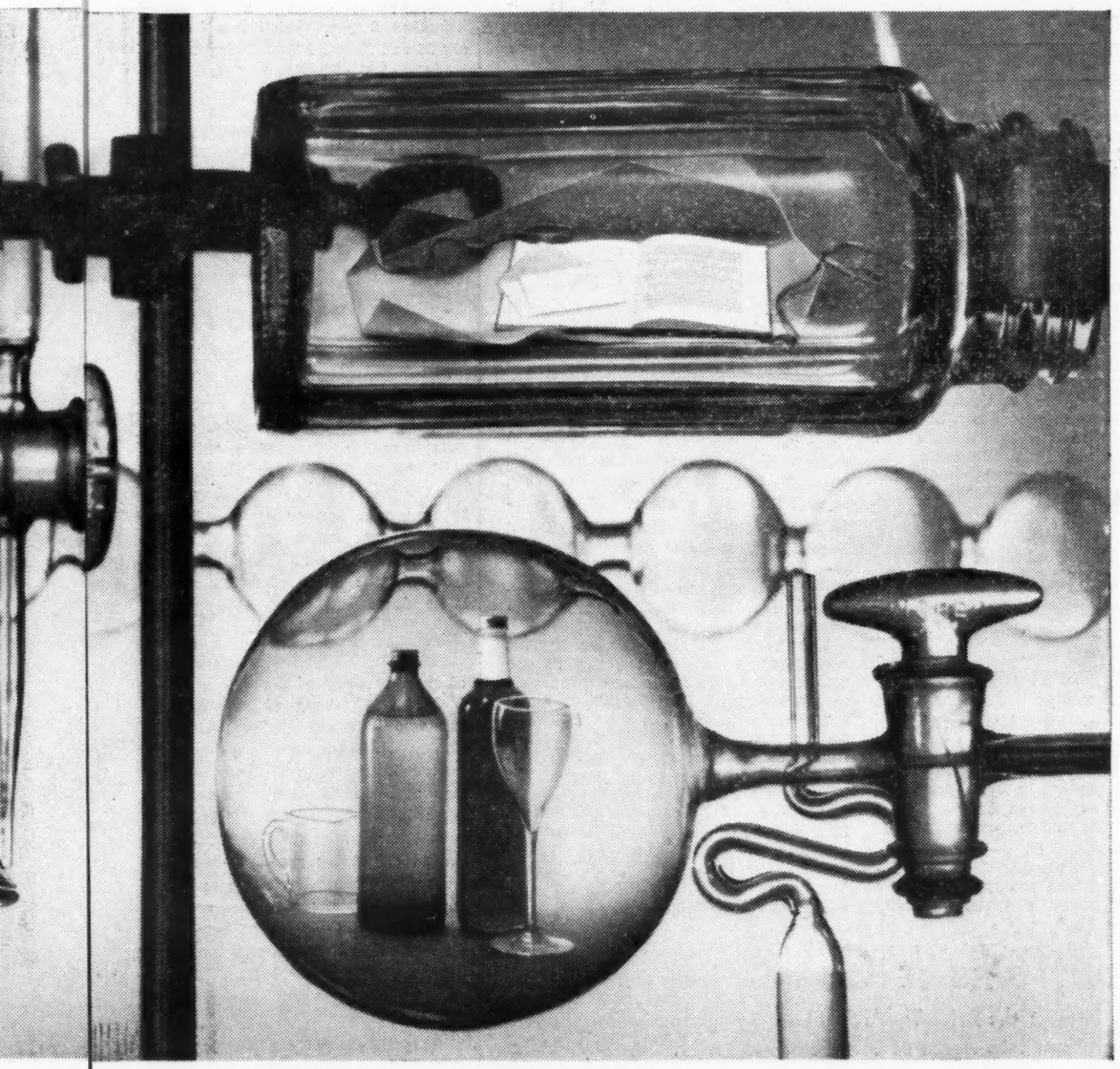

VER OLLAR-DRAINING PROCESSING PROBLEMS

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Oil, Paint and Drug Reporter

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Volume 175 May 11, 1959 No. 20

From the Consumer's Corner

There is a big and important lesson in current trends in economic philosophy behind the news on page 5 of OPD last week that the last producer of tartrates in this country has shaken off that role and is becoming an importer. As stated in the item, this revolutionary shift was an enforced one: the manufacturer could not meet the price competition of imported products and was denied adequate tariff protection by Presidential vetoing of a requested and proposed increase in the existing rate.

Behind that action is the steadily growing conclusion and belief among important members of the executive branch of the government that the best-for-all policy in the imperatively needed combatting of inflation is to give the consumer a better break, not by increasing his spending capacity—and adding further to costs—but by paring cost-boosting profits of both employer and employee and making the consumer's dollar go farther.

Labor does not take very kindly to that reasoning; neither do stockholders. Consequently, management is in large degree on a fence—and that fence has several strands of barbed wire. So, management is getting down—or at least trying to—not wholly of its own volition; but, it is still puzzled over what to do.

Three procedures are getting a deal of consideration. One is that adopted by the tartrate maker, converting to importer. Another is the licensing of producers in less costly countries under special processes, with conditions calling for the allocating of certain percentages of the output to the licensor, some of it to be imported by him. The third is the establishment of production facilities or investment in existing facilities in lower-cost countries and becoming a direct exporter to the US market. Switzerland and the Benelux countries are getting a deal of attention in that repect.

Along with those moves is coming a vigorous promotion of US leadership, political and commercial, in the elimination of world-trade barriers. The days and ways of McKinleyism are fast fading into oblivion. Wise business leaders can find much to think about and act upon in respect of meeting the consequences at the world trade fair now in progress in the New York Coliseum.

Stabilizing Lead and Zinc

Among its numerous units with this, that, or some other purpose, the United Nations has a committee on lead and zinc. That group is composed of representatives of twenty nations which are the major exporters and importers of the two metals. After a week of secret deliberations, that committee let it be known more or less directly May 3 that the major producers in its makeup had agreed to cut supplies of the two metals by 10 to 20 percent "so as to stabilize world markets and prices."

One of the major—if not the chief—contributors to the motivation of the "stabilizing" action was the naturally resentful reaction in producing countries — especially Australia, Canada, Mexico and Peru—to the recent imposing by the United States of quotas on imports of lead and zinc. The deputy director of the State department's office of international resources, who headed the US delegation in the UN conference, is reported to have expressed the opinion that the proposal to curtail supplies "could prepare the ground for a possible future lifting of US quotas."

Unless this country will be one of the curtailers, it is difficult to follow his reasoning. Another difficulty is presented by the trends in current superactivity by the federal trust-busters having to do with anything and everything that has a potentiality of keeping prices up by means of "agreements" to curtail production.

There is no agreement in the situation, but it can logically be expected that price-depressing will be substantially reduced if the Soviet Union lives up to the declaration by the head of its delegation in the UN conference that it is "prepared" to curtail its exports—dumping—of lead and zinc to the western world by 20 percent.

Oil Import Exemptions

President Eisenhower by proclamation April 30 lifted the mandatory controls on imports of petroleum from Canada and Mexico. The exemption of Canada is actual; that of Mexico is potential for the time being because that country does not now meet the conditions that the imports be eased from "sources which would be accessible by overland transportation in the event of an emergency."

It is not believed that the exemption of Canada will effect much difference in the volume of imports from that country. But, it can and will contribute much toward the betterment in many respects of relations between this country and its northern neighbor, friend, ally and partner. Those relations were somewhat strained by the import control order of several weeks ago; although the Canadians did not "blow their tops" in any official or private expression of their naturally expectable feelings.

The President should give serious consideration to the extending of the "theoretical" exemption now applicable to Mexico to all other Latin-American sources of petroleum. When the Soviets have attained their oil objective in the Near East—they are pushing toward it with more than a little progress in Iraq—their rather monopolistic position as a supplier of the free world markets will price-cut Venezuela, for instance, out of them. The next step, of course, would be "integration" of the Venezuelan oil resources—and a bigger hold on Latin America.

25 YEARS AGO IN Oil, Paint and Drug Reporter

(ISSUE OF MAY 14, 1934)

"Washington, May 11—Division administrator H. O. King of the National Recovery Administration told a committee representing the wholesale drug trade in a conference here today that he absolutely would not send to Administrator Hugh Johnson a code permitting wholesale druggists to have a forty-five-hour work week."

Indications that the chemical industry seems to be slowly coming out of the depression appears in this OPD news item: "Factory employment in the manufacture of chemicals and related products in the United States increased 2 percent between February 15 and March 15, according to the records of the Bureau of Labor Statistics."

Reynolds Metals Company, New York, has completed the construction of a new plant at Louisville, Ky., for the production of aluminum bronze powder for the paint industry. The new facility will double the company's output.

50 YEARS AGO

(ISSUE OF MAY 10, 1909)

"Interest of the drug importing trade for the moment centers to a greater or lesser degree on the position of vanilla beans," says an OPD editorial, "and the anxiety is freely expressed that the present high market may soon be subject to further advances." The editorial goes on to say that both French bourbon and Mexican beans are firmly in the hands of a few speculative firms and combines and will probably be forced higher.

Clarence N. Kline, who has charge of the laboratory of the Smith, Kline & French Company of Philadelphia and who is a son of the president, Mahlon N. Kline, narrowly escaped serious injury in a runaway a few days ago. He was driving a spirited horse in a light runabout when the animal suddenly shied and then started off at top speed. A lurch of the vehicle threw Mr. Kline out, but he struck his shoulder and escaped with cuts and bruises. The horse ran for four miles before it was caught.

75 YEARS AGO

(ISSUE OF MAY 14, 1884)

Just returned from a tour of New England, J. W. Jones of 136 Maiden Lane, agent for the Delaware Oil Refining Company, reports that "trade is very much depresed everywhere, and that values are lower elsewhere than here." According to the OPD account, Mr. Jones thinks "the prospect rather gloomy for an early resumption of the old-time business."

"Attention is now directed to California as a new source of demand for lubricating oils," OPD's lead editorial points out. "Manufacturers and dealers in this city report an unprecedented demand at present for paraffin and black oils from the coast."

Washington Talks It Over

Chemical Industry Lawyers Watching With Interest the Drive That's Just Getting Started in Congress To Halt Creeping Invasion by Federal Government Into Areas of State Law Authority.

By Ralph L. Cherry
Washington Editor

Chemical industry lawyers are keeping a weather eye on the drive just getting under way in congress to halt creeping invasion by the federal government into areas of state law authority. Due largely, but not entirely, to court decisions that have given the broadest meanings to the intent of congress in passing regulatory legislation, the subject matter contains implications quite important to the chemical industry and its many allied trades.

At issue is legislation that would establish rules of interpretation to govern questions of the effects of congressional enactments on state laws. It is designed to resolve the issue of state vs. federal enforcement in such important fields as food and drug, labor union activities, pollution and other areas where overlaps occur, all of vital concern to chemical manufacturers in some degree. Most state laws in these fields are more strict than the federal law.

Centralization of the governing power in Washington has been a recognized fact since long before civil rights became a real issue. Congress is partly to blame for failing to be more explicit in writing the laws, but the supreme court is chiefly responsible because of its tendency to rule that state laws must give way when the federal government steps in—even though the state law may not be in conflict with the federal statute.

Some examples: Alabama was unable to enforce its law for inspection of renovated butter because congress had legislated on this subject; Pennsylvania found itself barred from enforcing a state sedition law against a man who advocated violent overthrow of the government; various state laws for protection of health and safety by preventing work stoppages in labor disputes involving public utilities have been knocked down; Virginia could not prosecute a narcotics peddler under its law because the federal government preempted this field.

Congress came within an ace of passing corrective legislation last year over the objections of the legislators who favor big government. It failed only because the bill was caught in the legislative end-of-the-session log jam. Advocates are taking no chances on a similar situation developing this year. They are pressing for early action so that there will be ample time for final action before the curtain rings down on this congress in 1961.

Heavy Chemicals

imported refractory grade material advanced $1.20 to $26.20 near the close.

Borax — For those who missed last week's announcement of the new schedule for borax, with advances to take effect July 1, here are the new prices for bulk and carlots. Anhydrous borax will rise $4.50 per ton to $92 in carlots and $83 in bulk. The first of these prices, incidentally, was quoted incorrectly here in the last issue. Granular will be advanced $2.50 for decahydrate to $50 in carlots and $43.50 in bulk, and $1.50 for pentahydrate to $64.50 in carlots and $58 in bulk.

The schedule for smaller quantities together with the price outlook for borax chemicals will be announced later.

Caustic Potash — Business has been in a gradual upward trend since March, trade sources report, and sales figures for April are expected to show an appreciable gain over the same month last year.

Caustic Soda — Supply was ample and price steady last week as rayon and cellophane accounts continued to absorb material in seasonable volume.

Phosphates — Market is expected to stay active through the balance of this month, but thereafter, soaper accounts will seasonally slacken, trade sources say. Other outlets should be in the market until plant shutdowns start this Summer.

Nonferrous Metals

Aluminum—Aluminum output in March totaled 157,189 tons, a sharp advance from February's 142,116, which brought the total for the first quarter to 456,013 tons. In comparison, March output a year ago reached only 134,020 tons, with a first quarter total of 395,909. Figures for both March and the first quarter established all time highs, according to a report of the Aluminum Association.

Chromium—Consumption of chromite dropped 1 percent in January, according to a report of the Bureau of Mines. A sharp drop in metallurgical use, 19 percent, was partly compensated by increases of 2 percent in refractory and 8 percent in chemical use. The metallurgical category, including chromium ferroalloys and chromium metal, absorbed 68,232 tons of chromite to produce 27,968 tons of refined metals, while steel absorbed 1,318 tons, the Bureau noted.

Producing refractories used 35,359 tons of chromite, plus an estimated 700 tons for furnace repairs. Chemical makers took 13,201 tons to produce 10,031 tons of chemicals on a sodium bichromate equivalent basis.

The lion's share of the market continued to go to imports, these totaling 199,848 tons as against only 18,710 consumed and a mere 9,854 produced domestically

Lead—Price was advanced to 12c. per pound, New York and 11.8c., E. St. Louis. Sales reached a brisk pace that culminated in a total of 17,054 tons for the week. Some secondary producers were reported to be holding material close in anticipation of better prices.

Mercury—Supply was still tight and price firm. Quotations for prompt shipment, minimum ten flasks, ranged $245 to $250 per ton, unchanged from a week ago.

Silver—Bullion, with price unchanged for several months, held to its steady trend. Spot material was moved at 91⅜c. per troy ounce.

Tin—Demand continued active with price closing on Friday at $1.02⅝ per pound, spot, down ⅜c. from a week ago.

Zinc—Zinc smelter output declined in April but shipments were up, according to the American Zinc Institute. Output totaled 76,393 tons as against the previous month's 79,918, while domestic shipments advanced to 78,358 tons from only 73,814. Export shipments of 255 tons made for a total movement of 78,613 tons. Stocks closed the month at 203,863 tons as compared with 206,083 at the start. Daily production averaged 2,546 tons per day, the report noted.

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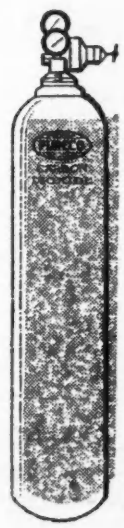

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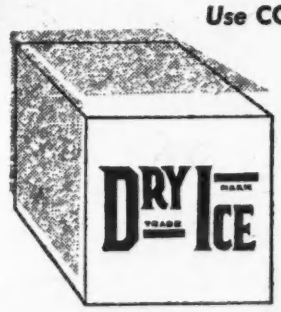

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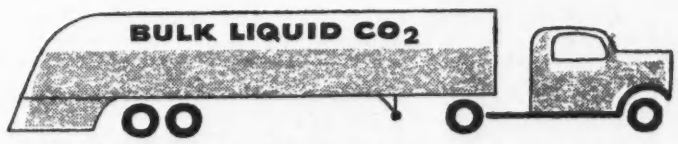

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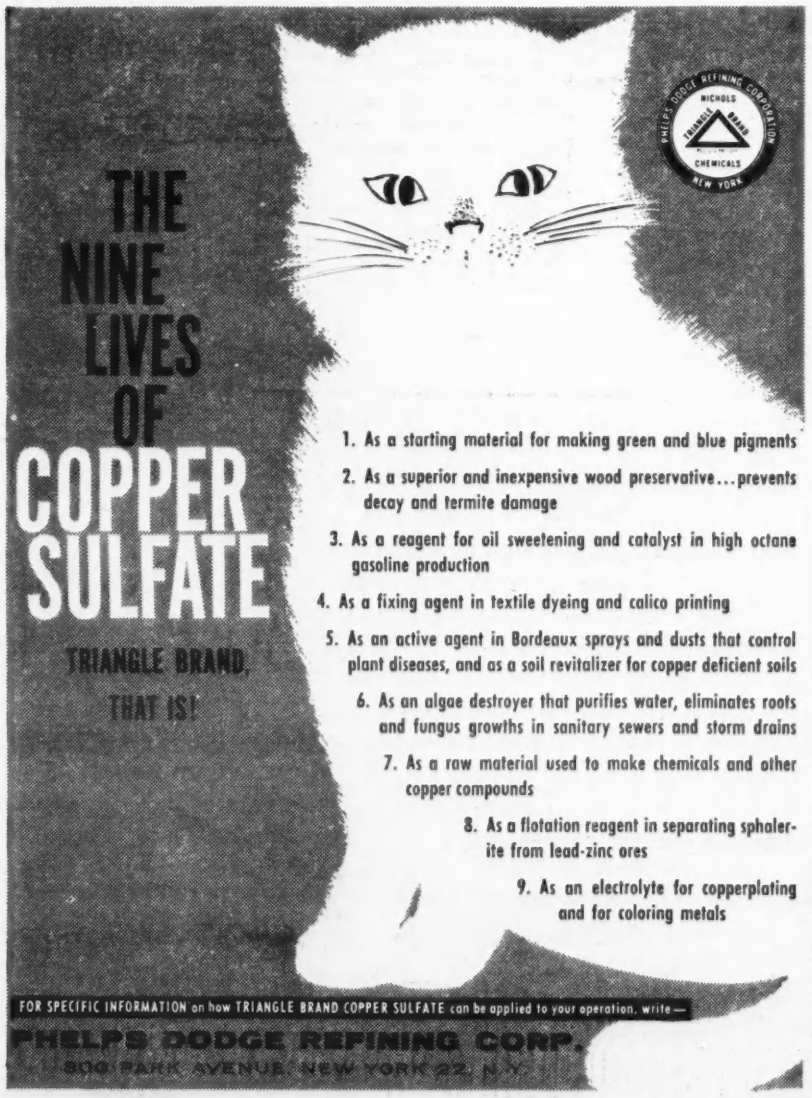
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Jobs & People

Borden Chemical Company, New York—**Nicholas B. Alaga** has been named western sales manager of the consumer products department. At the same time the firm has named **Lee Turhune** as assistant development manager at the Resinite department plant in North Andover, Mass.

Heavy Minerals Company, Chattanooga, Tenn., subsidiary of Vitro Corporation of America—**Fred W. Drosten** has been named director of metallurgical development.

Metal & Thermit Corporation, New York—**F. L. Scott** has been named technical manager of the organic coatings division.

Michigan Chemical Corporation, Saint Louis, Mich.—**Donald W. Kase** has been promoted to production engineer assisting the firm's director of operations. Also, **Bruce L. Dwiggins** has been appointed production superintendent of the new magnesium oxide plant at Port St. Joe, Fla.

Monsanto Chemical Company, St. Louis, Mo.—**Robert L. Berra** has been promoted to director of personnel for the plastics division.

French Have Hopes

—Continued from page 7

plants, with 125 of them in Bouches-du-Rhone. There are ninety-five in greater Marseille.

A few plants in Provence, according to the BDSA report, are large, but most of them are small or medium-sized. Of the 150 mentioned above, six have more than 500 employes and twelve have 200 to 500.

Big items on the Provence list of chemicals are sulfuric acid (based principally on iron pyrites and produced in fifteen regional plants); chlorine (from two plants); superphosphate (from fifteen plants which averaged an annual 60,000 tons in 1957); fertilizer (with a regional output about 150,000 tons it is something like 7 percent of the national total and has increased 35 percent between 1954 and 1957).

Other major chemical products, BDSA says, include copper sulfate, made in four regional plants averaging an output of 20,000 tons per year, which is 35 percent of the French total, though merely 65 percent of Provence capacity; and tartaric acid, an industry old to the region, and supplying some 90 percent of total national output.

The regional plastics industry is growing rapidly, BDSA notes, with annual output estimated at 4,000 to 4,500 tons in 1957.

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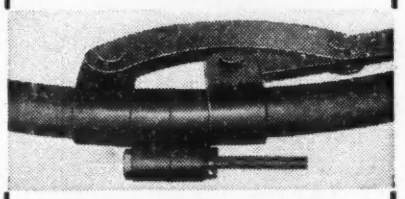

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Obituaries

Daniel Llyng Boland

Daniel Llyng Boland, general counsel of National Paint, Varnish & Lacquer Association and a prominent Washington, D.C. attorney, died May 3 in that city. He was fifty-six years old.

J.Edmund Good

J. Edmund Good, manager of the chemical division of G. S. Ziegler & Co., Great Neck, N. Y., died on April 7.

Mr. Good had formerly been a vice-president of Woburn Chemical Company, Harrison, N. J.

Arthur S. Randak, assistant eastern division manager of Sinclair Refining Company, New York, died May 5 in Cambridge, Mass. He was forty-six years old.

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Toilet Goods People

—Continued from page 5

uation. The Bureau of Customs gave notice on May 1 that it is considering changing its regulations on trademark enforcement.

At the present time, an applicant for recording a trademark or trade name with the Treasury Department is required to disclose the name and address of each related company or foreign person, partnership, association or corporation using the trademark while acting as the principal or agent of the trademark owner.

Goods Not to Be Excluded

Under the bureau's enforcement policy, and in line with the stand taken in the court cases, the goods originating with the trademark owner's foreign related company, and bearing the trademark, are not to be excluded from entry into the country.

The May 1 notice of the bureau is to eliminate the requirement for listing related companies from the regulations. The effect of this would be, it was explained, to give protection to the American trademark owner.

Butter, Oleo Men

—Continued from page 3

edible fats. The bill I have introduced would allow continued use of these colors at safe levels for a limited period until September, 1961, or the earlier enactment of general color additives legislation, or the development of suitable fats soluble replacements.

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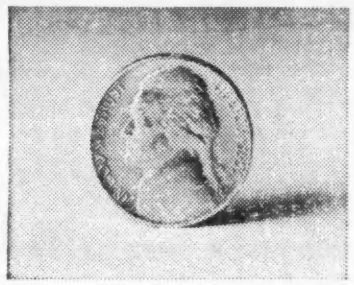

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Business Gains Almost Dramatic, Buyers Say

—Continued from page 5

continues to bother many buyers (and sellers). Our members are carefully watching OCDM's actions regarding the possible disposition of surplus stockpile copper.

Inventories

Buyers continue to increase their inventories, particularly steel, against the probability of strikes this June and July. Again in April, a high percentage, 42 percent, show larger inventories than last month. There are 52 percent who say their inventories are the same, and only 6 percent report any reduction. With practically no exceptions, purchasing executives frankly explain their inventory build-up as a hedge against the anticipated steel strike. However, a number indicate that their build-up may not be as much as planned because of high usage resulting from increased production schedules.

Employment

A noticeable jump in employment this month is reported. While 29 percent reported better employment in March, 37 percent show more people on their rolls in April. Only 7 percent say they have fewer employes this month. The big bulk, 56 percent, report no change. Higher production schedules and seasonal pickup are the most frequently stated reasons for the increase in employment. Those reporting lower employment generally reflect local conditions.

Buying Policy

A very slight increase is noted this month in the longer-term commitments for capital items. Production items, notably steel, continue to shift from the shorter term to the 60-90 day bracket.

	Per Cent Reporting				
	Hand				*6 Mos.*
	to	*30*	*60*	*90*	*to 1*
April	*Mouth*	*Days*	*Days*	*Days*	*Yr.*
Production Materials	7	25	34	26	8
MRO Supplies.....	21	49	18	11	1
Capital Expenditures	9	9	9	24	49
March					
Production Materials	6	29	29	24	12
MRO Supplies.....	21	49	20	7	3
Capital Expenditures	12	6	16	24	42

Specific Commodity Changes.

A comment about copper and lead: The unstable price of these two commodities in the past few months has resulted in reports this month of these items being both up and down, depending on when the buyer entered the market.

On the up side are: Paper, some vegetable oils, lumber, control instruments, electrical equipment, menthol and mercury.

On the down side are: Steel scrap, coal and linseed oil.

In short supply are: Galvanized steel plates and sheets, and helium.

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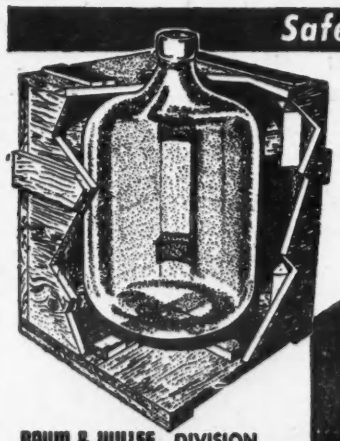

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Urea, Calcium Ammonium Nitrate Bids Asked for India

General Services Administration last week invited fertilizer manufacturers and suppliers to again submit bids for supplying India with its fertilizer needs for the new year. The agency asked for offers on 16,772 metric tons of fertilizer grade urea or 36,968 metric tons of calcium ammonium nitrate.

This is a readvertisement of the requirements contained in a invitation issued last February on which a number of bids were received but rejected because of failure to meet certain specifications.

In its new request, the agency has modified the requirements in several respects, chiefly to drop the invitation for offers for supplying ammonium nitrate, and to provide a delivery time of 30 days after notice of award but in no case more than forty-five days. A barter provision has also been added.

The agency is asking for the offers to be filed by May 25 to be opened at 3.30 p.m. EDST. The invitation number is FN-4S-15908-A-5-25-59-R and offers should be sent to the agency's national buying division, Federal supply service, Seventh and D street, S.W., Washington 25, D. C.

Allied Int'l Post to Reiche

Arnold T. Reiche has been named assistant to the president of Allied Chemical International, a unit of Allied Chemical Corporation, New York. Mr. Reiche was formerly with Shell Chemical Corporation in the domestic marketing department of its agricultural chemicals division and in the export sales and development department.

Chemical Price Adjusting

—*Continued from page 3*

right to subpoena company records in civil antitrust investigations.

The pre-mergers notification bill requires corporations with $10 million or more assets to give the government sixty days advance notice of proposed mergers.

Several changes were made in the bill before it was passed along by the Kefauver subcommittee to make it more palatable and slightly less objectionable to industry critics.

Stock and asset transactions of less than $2 million were exempted as a sop to small business opponents of the bill. Also excluded were undeveloped or partially developed mining, mineral and timber enterprises, along with banks, bank holding companies and banking associations.

Isocyanates Facility

—*Continued from page 3*

treatment chemicals is in short range prospect, says Carwin.

The di-isocyanate specialties are in use for the synthesis of high performance plastic and elastomeric materials and for other novel uses ranging from lubricants to high performance adhesives, while the polyisocyanate is the protenitor of unique high temperature resistant plastics, high strength rubber bonds, ablative plastics, and high temperature resistant elastomers.

Agriculture Chemists

—*Continued from page 4*

grain via fermentation. He pointed out that fermentation has recently been of value in producing certain amino acids.

He did caution, however, that fermentation requirements for cereal starting materials are not likely to do much for surpluses immediately. He notes that the demand for products derived from cereal is still too small to merit production on a large scale.

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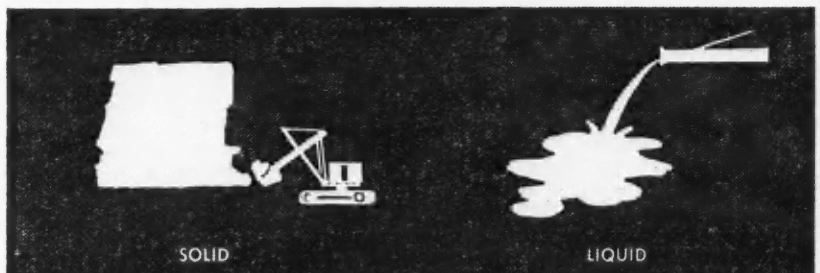

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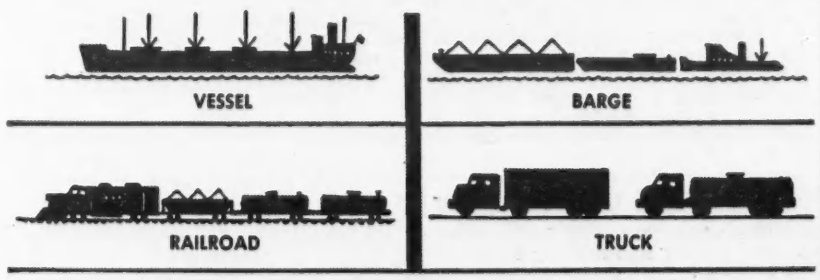

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UV Absorbers Light Way to Industrial Chemical Market of $10 Million by 1965

OPD Special Report on Ultraviolet Absorbers

—*Continued from page 3*

to $5.25 to $15 for the benzophenones. For another, its color is white, whereas the other industrial light stabilizers vary in color from off-white to yellow.

While the benzophenone UV absorber producers feel they'll take away a large portion of the market from salol, there is still plenty of strong argument for the latter's continued use.

Dow Chemical Company, Midland, Mich., which has the biggest stake in the salol field, points out that in many applications, the required degree of protection from ultraviolet degradation can be obtained most economically with salol.

Salol Could Stay Around

For some time now, plastics producers have recommended that salol be used in combination with the benzophenones for protection against UV light. This means salol could stay around for a long time yet.

If it took the two pioneers in the field (General Aniline & Film Corporation and American Cyanamid Company) more than five years to lead the industry to a 200,000-pound-a-year market, why do observers think consumption will double in 1959?

• The number of producers is increasing rapidly. This means more aggressive action in existing markets, and deeper penetration into new ones.

Already GAF and Cyanamid are competing with Dow, Geigy Chemical Corporation, Ferro Chemical Corporation, Koppers Company and Nopco Chemical Company. All but Geigy make substituted benzophenones, while that firm is marketing a benzotriazole derivative.

At least three other producers are on the verge of getting into volume output of substituted benzophenones: Eastman Chemical Products, Inc., American Phosphors Company and Argus Chemical Corporation.

Of the three, American Phosphors is going all-out in development of a water-soluble material in an attempt to tap the huge latex paint market. Argus is hoping to come up with a line of absorbers superior to those now in use. Eastman hasn't trade-named its material, nor set a price on it yet.

American Cyanamid's Breakthrough

• American Cyanamid has come up with a breakthrough in UV absorber technology — 2,2'-dihydroxy-2-n-octoxybenzophenone—which is compatible with polyolefins.

This material alone, Cyanamid says, will be responsible for a 10 to 50 percent growth in polyethylene consumption over the next several years. This means a rise of from 83 million to 400 million pounds of resin, and an increase of from 400,000 pounds to a million pounds of UV stabilizer, depending on which growth estimate you accept—if you accept either.

• Light-stabilized polyester resins last year consumed an estimated 50,000 pounds of benzophenone-type absorber. Producers of UV absorbers emphasize that their materials have been the largest single factor in polyester growth.

The rapidly growing use of polyesters in the boat and auto industry for hulls and car bodies, they point out, has been made possible only because UV absorbers have been incorporated to prevent degradation of the resins in sunlight.

This has made possible such events as an announcement last week by White Motor Company, Cleveland, Ohio, that it has on hand orders for 500 trucks with glass fiber-polyester cabs.

• A producer of polyvinyl chloride sheeting and film estimates that anywhere from 10 to 15 percent of these materials are currently light-stabilized.

The versatility of outdoor uses for vinyls has long been demonstrated, but there has been a serious ultraviolet-degradation problem. UV absorbers are expected to get into this field in a much bigger way, although they'll have tough competition from special epoxy plasticizers and hydrogen chloride acceptors for some uses.

Then, there is the glorious dream of getting UV absorbers accepted in the polyvinyl butyral lamination layer of safety glass for automobiles.

This process costs about 35 cents a car if UV absorber is used in all windows. Multiply this figure by the number of autos produced each year, and you get an idea of possible dollar volume.

• Cellulosics' use of substituted benzophenones in 1958 is tough to estimate, but is thought to be around 58,000 pounds. These materials include clear coatings, film and sheeting.

However, if consumers can be persuaded to use these absorbers instead of some of the 360,000 pounds of salol now consumed, gains in volume could be registered aside from normal market expansion.

Many believe that the cellulosics market in the future will be just as active as any other application. Toss in nitrocellulose, half-second butyrate, cellulose acetate and similar lacquer use, and it is here that the lion's share of UV absorbers' non-plastics consumption occurs.

"If you can get these substituted benzophenones into cellulose plastics," a Cyanamid spokesman says, "you can get them into cellulose fibers." This pretty well opens up the textile field to UV absorber producers.

• Use of light stabilizers in acrylics is significant at present, but small. A key to the specialty nature of this market is that acrylics are pretty light-stable to begin with, and acrylic finishes for furniture and the like are too soft to gain overwhelming acceptance.

• Polystyrene's use of the benzophenones last year is estimated at around 18,000 pounds. Increasing consumption of this resin for outdoor and other sunlight-exposed purposes, observers believe, will account for a considerable climb in sales volume this year.

The foregoing are just some of the highlights of the market. But should American Phosphors come through with its water-soluble absorber, for instance, the whole aspect of the market could change.

Not everyone agrees with the conclusions drawn by some of the more optimistic market researchers. Several statisticians take issue with the results of Cyanamid's survey on the effects of UV absorbers on polyethylene.

Where Cyanamid predicts a polyethylene growth of 83 million to 400 million pounds in the next several years, a less optimistic UV absorber maker points out that a large polyolefin producer has estimated that outdoor film applications won't exceed 10 million pounds by 1965.

Parable of the Door Handle

There are also strong arguments countering the polyvinyl butyral projection. They have to do with money. One observer offers the parable of the door handle:

"A man designed a new door handle for an automobile that cost 4 cents more than the old one, but was better in every way. He was told to re-design it to cost the same as, or less than the old one."

This suggests that the automobile industry—even if it puts laminated safety glass all the way around its cars, will not spend the additional 35 cents per car for UV protection of interiors.

Then, too, vinyl rear windows on convertibles today, at a cost of 15 cents per car, could be stabilized with UV absorber to a point where they would last the car's lifetime. But the auto industry won't pay that 15 cents.

Despite some disagreement as to the size of the impact of the substituted benzophenones and triazole derivatives on the plastics market, it is clear that most of the industry's efforts today are aimed at plastics, rather than in the non-plastics fields.

The newcomers in the market, as well as those about to enter, are centering their research and development largely in this area. "If we can get a portion of the polyolefin market alone," one source points out, "all our work in these materials will have been justified."

Here's what could happen in the polyethylene market: Not long ago, resin producers pushed polyethylene for outdoor applications of all sorts, including inexpensive greenhouses, pool liners and the like.

But it was soon found, to the chagrin of all, that polyethylene film lost its flexibility when exposed to weather and sunlight for only a month, and rapidly deteriorated.

After long work, Cyanamid solved the problem of compatibility of UV absorbers with straight-chain hydrocarbons and, with "UV 314," opened up the market for marine ropes and fabrics for automotive upholstery and lawn furniture, for instance.

Other applications the company suggests for light-stabilized polyolefins (including polypropylene fibers, which should be coming into their own within the next few years) are in film and sheeting for greenhouse covers, mulching, tarpaulins, high-altitude balloons and moisture barriers for building construction.

Heretofore, only carbon black—which naturally limits outdoor use to black, opaque polyethylene materials—has been compatible.

Other producers, as well as Cyanamid, hope to benefit from the expected boom in polypropylene during the next few years.

And speaking of fibers, it is easy to see why American Phosphors is going all out in its development of a water-soluble light stabilizer, since such a product could be used in textiles through water-bath mixing, for example.

While plastics are important, feeling is strong in a few quarters that they won't be the whole story in the future, as far as the growth of UV absorbers is concerned.

Growth Seen Split Fifty-Fifty

One producer believes that growth of substituted benzophenones and benzotriazoles will be split fifty-fifty between plastics and non-plastic uses during the foreseeable future.

What are some important non-plastics uses? It's not easy to tell exactly, but it's more than evident that the coatings business makes up most of the market's balance.

One large-volume application is the coating of display window glass—either directly, or through cellulosic or other plastic films—in order to protect the displayed merchandise from ultraviolet light damage.

UV absorbers are also incorporated into furniture finishes to prevent wood from fading or otherwise altering color. There is limited application in exterior finishes at present, and use is likely to continue limited, since in any heavily-pigmented

—*Continued on page 52*

UV ABSORBER PRODUCERS: WHO THEY ARE

The Industrial Market—Benzophenones, Benzotriazoles and Salol

	Name	Type
American Cyanamid	"Cyasorb"	Substituted Benzophenone
Dow Chemical	"HCB," "DBR"	Substituted Benzophenone
Dow Chemical	Salol	Phenol Aromatic Ester
Ferro Chemical	"Permyl B-100"	Substituted Benzophenone
Geigy Chemical	"Tinuvin"	Benzotriazole Derivative
General Aniline	"Uvinul"	Substituted Benzophenone
Koppers Company	Benzoyl Resorcinol	Substituted Benzophenone
Koppers Company	Resorcinol Monoacetate	Resorcinol Ester
Nopco Chemical	"Nopcosorb L"	Substituted Benzophenone
NYQ Chemical Division	Salol	Phenol Aromatic Ester

Argus Chemical, American Phosphors and Eastman Chemical Products all have ultraviolet absorbers of the substituted benzophenone type in the development stage.

UV ABSORBERS AND PLASTICS

The 1960 Potential Is Tremendous

Polyolefins	750,000 lbs.
Vinyls	500,000 lbs.
Polystyrene	350,000 lbs.
Polyesters	175,000 lbs.
Total	1,775,000 lbs.

Cellulosics are expected to consume an estimated 75,000 pounds of substituted benzophenone ultraviolet absorbers in 1960 for plastic and non-plastic uses. Acrylics are slated to take 7,000 pounds in plastic and non-plastic applications.

Trade Name Chemicals & Specialties

Of the five basic wax types—petroleum, vegetable, animal, mined, and synthetic—petroleum waxes are the most widely used and have the greatest supply problem. The demand for petroleum waxes is expected to practically double itself by 1965, but this outlook is dimmed by the fact that shortages are in the offing unless refiners adopt new processes that will yield more petrowax. On the other hand, as far as most of the nonpetroleum waxes are concerned, no supply problems are anticipated. During the next two decades, the other types of waxes, such as Fischer-Tropsch and lignite waxes, will have sizable increases in consumption as well. The nonpetroleum waxes have great production potential if the demand can be further developed.

The industrial fungicide field has broadened considerably since World War II when the government bought quantities of fungicides to preserve military equipment. Application has moved into such fields as paints, wood, textiles, adhesives, and paper and leather.

Fungicides are added to paint for both in-can preservation and for protection of painted surfaces against mildew. Creosote and pentachlorophenol are popular fungicides in woods; and copper naphthenate and copper 8-quinolinolate are used for treating cartons and boxes used for packing such things as beverages, fruits, and vegetables. Fungicides are also finding application in the textile industry for use on heavy duty fabrics like tenting equipment, fire hose coverings, and awnings. In the paper industry fungicides are used to control slime in milling processes; in the leather industry fungicides are necessary on such finished products as shoes.

WHAT'S REPORTED ON HERE

Though coverage in the Trade Name Chemicals & Specialties market report encompasses twenty classes of chemicals, only a few of them are mentioned in this issue. Here's the entire list:

Adhesives, antibacterials and fungicides, antifoaming agents, antioxidants, antistatic agents, blowing agents, catalysts and accelerators, chelating agents, chemically processed oils, emulsions and latexes, enzymes, fatty acid derivatives, feed supplements, filtering materials, ion exchange resins, surfactants, synthetic waxes, textile chemicals, thickening and suspending agents, and ultraviolet absorbers.

If you have suggestions for any additional materials that might be included in this section, write OIL, PAINT AND DRUG REPORTER'S Technical Editor, 30 Church street, New York 7.

Antibacterials & Fungicides

Included in the general class of antibacterials are bacteriostats, bactericides, and disinfectants. Bacteriostats inhibit the growth of bacteria without destroying them; bactericides actually nullify the bacteria; and disinfectants inhibit and destroy harmful organisms. Fungicides, as the name suggests, kill fungi and their spores. Antibacterials and fungicides find wide application in all fields from the sanitation of hospital utensils to the sanitation of garbage pails.

Rohm & Haas Company has on the market two crystalline quaternary ammonium all purpose germicides, **"Hyamine 1622"** and **"Hyamine 10-X."** Both are colorless, odorless, stable, non-poisonous as used and are said to be effective at high dilutions against a variety of pathogenic micro-organisms.

According to Rohm & Haas, solutions containing over 25 percent by weight of either of the **"Hyamine"** products can be prepared with water, ethanol, methanol, isopropanol, propylene glycol, triethylene glycol, cellosolve, and methyl cellosolve. **"Hyamine 1622"** and **"Hyamine 10-X"** are described as being "invert soaps" having both detergent and wetting properties which can be enhanced by the addition of compatible alkaline detergents.

"Bionol RO-50" is a concentrated germicide with an active ingredient of n-alkyl dimethylbenzyl ammonium chloride marketed by Antara Chemicals, a sales division of General Aniline & Film Corporation. Antara claims that the product is distinguished from other quaternaries by its great effectiveness in hard water.

It is soluble in water, methanol, isopropanol, glycols, glycerine, acetone. **"Bionol Ro-50"** is compatible with certain cationics, dyestuffs, essential oils, or nonionics but is incompatible with anionic surfactants, oxidizing agents, such as dichromate and permanganate, and zinc chloride.

Furthermore, according to Antara, **"Bionol RO-50"** does not attack or degrade polyethylene, most plastics, natural rubber, or stainless steel. However, the product will corrode iron, brass, aluminum, lead, tin, and galvanized steels. Typical formulae of using **"Bionol RO-50"** include a wide variety of liquid and solid germicides.

Synthetic Waxes

The six major markets for synthetic waxes are paper and packaging, candles, polishes, carbon paper and inked ribbons, chlorinated paraffins and explosives. Growth in these markets is expected to increase rapidly in the next two decades. However, in the last few years, competition has arisen from the development of such materials as polyethylene and aluminum foils.

Croda, Inc., has developed a new synthetic wax described as an emulsifying wax which is trade named **"Polawax." "Polawax"** is a preparation of stearyl alcohol and ethylene oxide reaction products. Its efficiency has been proven as an ointment and cosmetic base made up of a combination of sulphated and non-sulphated fatty alcohols of the cetylstearyl type.

Croda states that the difference between their **"Polawax"** and other grades of this particular pharmaceutical and cosmetic base is in the fact that its oil-in-water producing properties are not derived from the presence of auxiliary anionic surface-active agents of the soap, sulphonated oil or sulphated fatty alcohol type or from alkalies, gums and the like. Contrarily, **"Polawax"** is non-ionizing in character, which has been an advantage in the making of ointments or creams that have to be autoclaved.

According to Croda, this creamy white wax-like solid, unlike some emulsifying waxes, does not deteriorate on heating at 150°-2° C. for two hours, other than slight alteration in color. Among its functions **"Polawax"** has proven an alternative to glyceryl monostearate, diglycol stearate, propylene glycol monostearate, and other waxlike emulsifiers. Croda claims that this is true both for cosmetic and pharmaceutical formulations.

Eastman Chemical Products, Inc., a subsidiary of Eastman Kodak Company, has on the market **"Epolene"** polyethylene waxes. This line of polyethylene waxes has opened up a new source of raw material for the wax and polish manufacturers. According to Eastman, **"Epolene E"** is designed for water emulsion polishes, but it has other uses as well. **"Epolene E"** is said to be easily emulsifiable by standard procedures which vary only in temperature control. When a proper balance of resins and leveling agents is incorporated in these emulsions, polishes result which have high gloss, good flow-out properties, and resistance to scuff and dirt pickup.

This practically odorless, pure white polyethylene wax has a low molecular weight of approximately 2500 which means low viscosity and low melting point. Eastman states that **"Epolene E's"** narrow viscosity range makes possible its formulation into finished products of constant and predictable consistency.

Another Eastman polyethylene wax is **"Epolene N."** This wax also has low viscosity and low melting point resulting in such properties as extreme hardness and toughness. Partially soluble in hot ester type solvents and high molecular weight alcohols, **"Epolene N"** is said to be insoluble in all cold solvents; however, it was

—*Continued on page 67*

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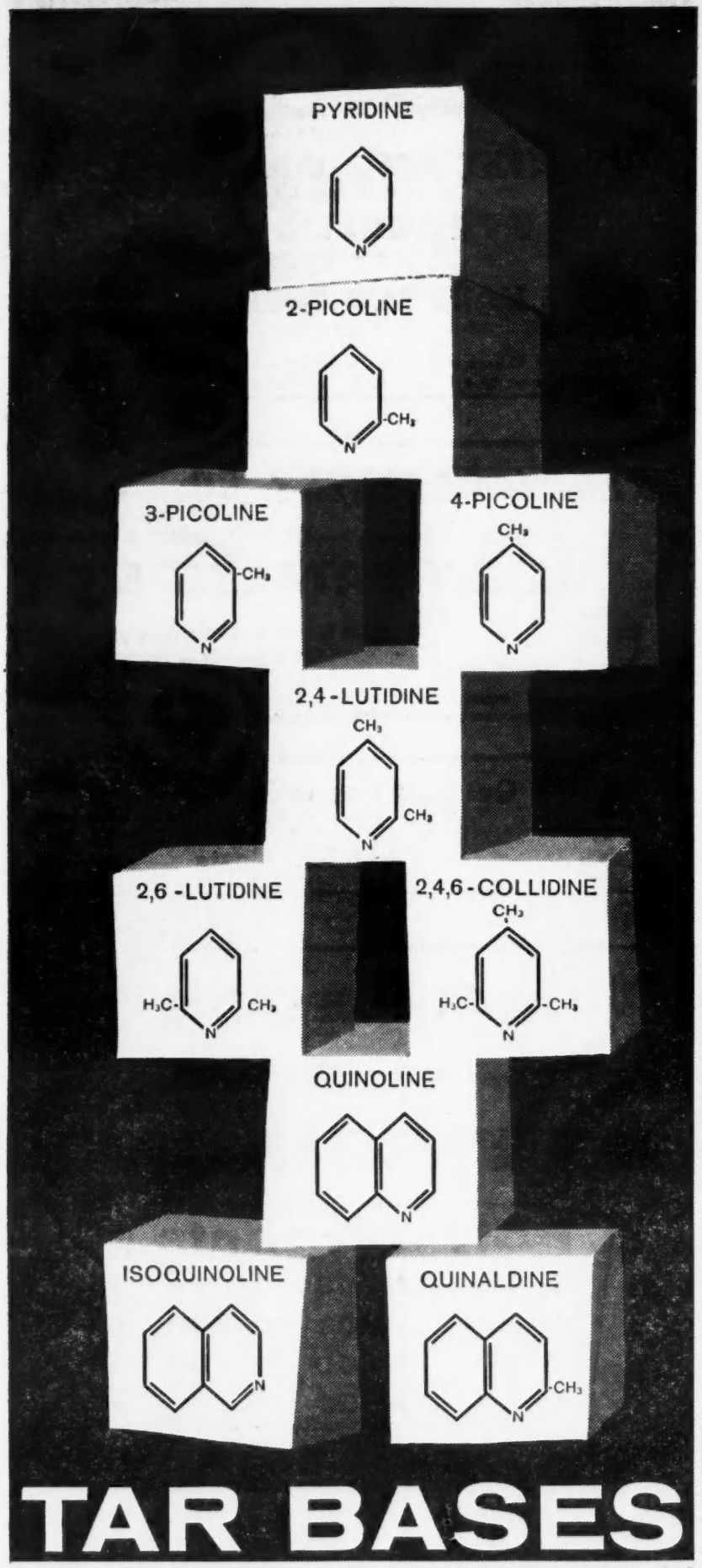

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Allied Chemical

Coal Chemicals

The price of synthetic phenol was reduced 1 cent per pound across the board last week. The action brought the tankcar quote down to 16½ cents per pound; carload of drums, 18½ cents; and less carload lots, 20½ cents per pound. At the close of the week, a coaltar producer had announced reductions on natural phenol ranging from ½ cent to 1 cent per pound. The last price change in the phenol market was a ¾ cent drop in synthetic material in early November of last year. Prices on natural phenol were dropped ½ cent per pound the following week. Last week's reduction came as a surprise to many in the trade. A potential tieup in coal chemicals production due to a steel strike was said to have brought on a fairly crisp demand for phenol. Despite better demand, however, excess capacity has been a sore spot in this market for many months. Expansions in phenol production currently underway were felt to have little to do with the price drop.

There was no import naphthalene coming in, aside from lots already contracted for. The supply situation continued cramped. Phthalic anhydride was active, and good quantities were moving to alkyd resins and plasticizer makers.

The American Iron and Steel Institute estimated that steel production in the week ended May 10 would amount to 94.2 percent of theoretical capacity equivalent to 2,668,000 net tons of steel. Output was 2,627,000 tons in the previous week, 2,641,000 in the comparable week one month ago, and 1,334,000 net tons in the corresponding week one year ago.

Shipments of finished steel mill products during March amounted to 8,117,688 net tons, according to the Institute. The total was surpassed only by the record 8.3 million tons monthly shipment of March, 1956. A record of 1,761,521 net tons was set in direct mill shipments to the automotive industry during March.

Price Trends

Advanced
None

Reduced
Phenol, USP, 1c. per lb.
Natural, 90-92%, ¾c. per lb.
82-84%, ½c. per lb.
39 degree, 1c. per lb.

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	May 9, 1958
118.56	118.57	118.57	118.13

For Current Prices see page 9

Basic Products

Benzene—Demand continued to show improvement, sources said. With the prospect of a steel strike looming in the background, big consumers have been anxious to assure themselves of an adequate supply of benzene to carry them through the period of an emergency. Current industry capacity was fully adequate to cover trade requirements. Added buying was especially noted in areas which are normally serviced by the cokeoven industry and which would be most adversely effected by a steel shutdown. Petroleum capacity is immense, and has been growing steadily in recent years, so that there was no talk of a shortage, such as has been noted in some materials supplied primarily as by-products of steel production. Price was unchanged at 31c. per gallon.

Sales of cokeoven material in March amounted to 14.7 million gallons; 12.5 million in the previous month, and 8.5 million in March of last year. First quarter sales ran to 38.5 million gallons as compared with 29.2 million gallons in the three-month period last year.

Coaltar—Bureau of Mines reported production of crude coaltar in March amounted to 82.3 million gallons as against 76.9 million in the month previous, and 54.3 million gallons in the corresponding week last year. Production during the first quarter amounted to 230.9 million gallons as compared with 164.6 million in the comparable period last year.

Creosote—Demand has been slow. Consumers were said to have filled their tanks prior to price increase of April 1, and a previous advance of December, 1958. Railroad buying has been very slow, as many roads have been forced to defer replacement and maintenance programs.

Naphthalene—Importers were not quoting on crude naphthalene for shipment before the last quarter. No material was coming in, aside from lots previously committed.

The supply situation has changed rapidly since the first of the year, due partially to the fact that the amount of storage capacity in the country is not large in comparison to the rate at which naphthalene is consumed. A combination of factors has aggravated the situation. These include the shrinking of imports following a 2c. per pound drop in domestic prices and heavy hedge buying against a possible steel strike this summer.

Phenol—USP phenol was reduced 1c. per pound across the board. By the end of the week, a basic producer in the coaltar industry had announced lower prices on natural phenol.

Under new schedules, natural phenol, 39 degree, was 16c. per pound; 95-97 percent, 15¼c. per pound; 90-92 percent, 14¼c.; 65-84 percent, 14½c. Prices are for tankcar lots. Differential on carload or truckload is 2c. per pound more, and less carload or truckload, 3c. more.

The reduction came as a surprise to many in the trade. The feeling was that a looming steel strike has brought on a fairly crisp demand for phenol. However, despite better demand, idle capacity has been a sore spot in this market for many months. A lower price might serve to broaden outlets somewhat, it was said, and discourage any further expansions in production. Expansions currently underway include a petrochemical producer's plant, which will supply captive needs for epoxy resins, and a chemical firm's new unit of 60 million pounds rated capacity in the Northwest. In some quarters, it was felt that demand has improved enough since third quarter 1958 to boost operating rates substantially, thus lowering production costs. Tariff Commission report for the first two months of '59 shows 104 million pounds of synthetic and natural phenol produced as against 87.6 million in the first two months of last year. Fourth quarter '58 production was 187 million younds as against 194.7 million in fourth quarter 1957.

In the opinion of tar distillers, the reduction will not stimulate buying to any great extent. Natural phenol has been in light supply for more than a year, and comprises less than 5 percent of the total market, it was said. The most widely sold natural phenol is the 90-92 percent material, and a differential of 2c. per pound under USP material has been traditional. This differential has shown no sign of increasing and, as a matter of fact, is now only 1¾c.

Toluene—Bureau of Mines reported cokeoven production of toluene in March amounted to 3,316,283 gallons as against 2,736,639 in the previous month, and 2,359,677 gallons in the comparable month last year. Output in the first three months of the year was 8,783,330 gallons as compared with 6,793,605 gallons in the three month period last year.

Sales of cokeoven material totaled 3,213,017 gallons in March as against 2,800,581 in February, and 2,420,540 in March, 1958. Sales for the first three months of 1959 were 8,587,998 gallons as compared with 7,250,796 gallons in the first quarter of last year.

Stocks at producing plants at the close of March totaled 3,340,499 gallons as against 3,447,078 at the beginning of the month, and 3,434,316 gallons at the end of March, 1958. Demand continued to show a modest improvement, it was said.

Intermediates

Maleic Anhydride — Producers were hard pressed to supply consumer demand. Some sources felt that situation has eased somewhat as seasonal demands have been taken care of. In other quarters, it was reported that maleic would probably remain in tight supply for the balance of the year at least.

Phthalic Anhydride—Market continued to show good tone. Demand was very active, and has been, for several weeks, sources said. Demand from alkyd resins outlets has been well maintained and plasticizers have contributed good support.

Coal Chemicals

Styrene Monomer — Market remained unchanged from previous report. The last price change in this market was a 7/10c. per pound reduction in the price of technical material for use in the rubber industry. The high level of operations in the automotive industry during the first quarter has been an important factor in improvements in the styrene market, it was said. Consumers bought heavily, too, in anticipation of labor trouble in the rubber industry at the expiration of contracts April 1. It was hard to tell what the demand pattern would be in the balance of the year, but sources contacted felt that here, as in other markets, the outcome of management-labor talks in the steel industry would weigh heavily.

Coal Chemicals

Estimated output of coal chemicals recovered from cokeoven operations during the week ended May 10, was as follows:

Ammonium liquor	lbs.	746,170
Ammonium sulfate	lbs.	40,203,940
Benzene	gals.	3,701,684
Coaltar	gals.	21,994,311
Crude chemical oil	gals.	697,178
Solvent naphtha, crude, heavy solvent	gals.	132,795
Toluene	gals.	896,371
Xylene	gals.	265,591

DCAT Shifts Luncheon Date

Drug, Chemical & Allied Trades section of the New York Board of Trade has shifted the date of its spring luncheon meeting from May 19 to May 25. Speaker will be Arthur S. Flemming, Secretary of Health, Education and Welfare. The place (New York's Waldorf-Astoria hotel) will remain unchanged. Reception will start at noon, with luncheon getting under way a half hour later.

Heyden Newport Introducing Additives for Epoxy Resins

Heyden Newport Chemical Corporation, New York, is in the process of bringing onto the market chemical additives for epoxy resins "with preliminary indications showing that one or more will achieve commercial importance."

Simon Askin, president of the firm, reporting last week at the annual stockholders meeting, reported on the new development and also noted that research and development programs for the manufacture and sale of new organic peroxides and catalysts continue to look encouraging.

Daniel Products Names Two New Sales Agents

Daniel Products Company has named two new agents.

G. R. O'Shea Company will represent the "Tint-Ayd" and "Flat-Ayd" dispersion line in northern Illinois, northern Indiana and southern Wisconsin. Alvin Rose will represent Daniel Products in the New York metropolitan area.

Chemical Foreign Trade

—Continued from page 4

same month in 1958. Whether this was a volume increase or simply represented higher values is something that the figures fail to show, however.

March exports of chemicals reached a total of $122.7 million, the bureau says, which compares with a value of $116.7 million in February, $115.4 million in January and $120.5 million in March of last year. Imports totaled $30.5 million in March, $27.3 million in February, $23.6 million in January and $25.3 million in March 1958.

The rise in imports coincided with the trend in imports generally, but this was not so in the case of exports. While chemical exports were going up to a new record for the first three months of the year, total exports of all merchandise were about 6 percent under the same period last year.

Exports of all merchandise in March was valued at $1,456.3 million, an increase of 14 percent over the unusually low February total of $1,280.2 million. For the three-month period they totaled $4,136.9 million, as compared with $4,402.3 million in the first quarter last year.

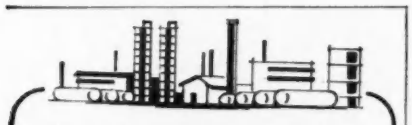
Bids Wanted

Aluminum Sulfate, stock no. 6810-598-3002, 1,080,000 lbs., 100-lb. bgs., Fed. Spec. O-A-429 & Amend. 2, **Sodium Carbonate,** stock no. 6810-664-0402, 720,000 lbs., 100-lb. bgs., Fed. Spec. O-S-571d, **Activated Charcoal,** 17,000 lbs., 50-lb. dms., Spec. MIL-C-506a, Bid IFB CML-04-205-59-12, May 20, US Army Chemical Corps District, San Francisco, 1515 Clay St., Oakland 12, Calif.

Ethylene Glycol, indefinite quantity, non-corrosive conforming to Spec. MIL-E-5559, dtd. 9 Jan., '59, contractor furnished rail tank cars, Bid IFB-36-600-59-435, May 26, Directorate Proc. & Prod., Middletown AMA, Olmsted AFB, Pa.

Formaldehyde, 40% by volume, 50 M/T, **Urea,** tech. pure, 20 M/T, **Phenol,** Tech. pure, 39-5-41°C. ice crystal, 10 M/T, **Melanine,** chem. pure, 95% up, 2 M/T, **Hexamethylene Tetramine,** 2 M/T, PA No. 89-390-99-P1-9260, May 29, Kukje Plate Industrial Co., Ltd., P.O. Box Central 434, No. 60 1-ka Myung-Dong, Seoul, Korea.

Trichlorethylene, indefinite quantity, packed in 600 lbs. per dm., IAW Spec. MIL-T-7003, dtd. 5 Sept., '59, for degreasing purposes only, Bid IFB 36-600-59-343, May 21, Directorate Proc. & Prod., Middletown, AMA, Olmsted AFB, Pa.; tech. grade, 97,600 lbs., stabilized degreasing, Spec. MIL-T-7003, in tankcar lots, Bid IFB 40-600-59-9B, May 22, Contracts Div., Attn.: AEKC, Arnold Engineering Development Center, Tullahoma, Tenn.



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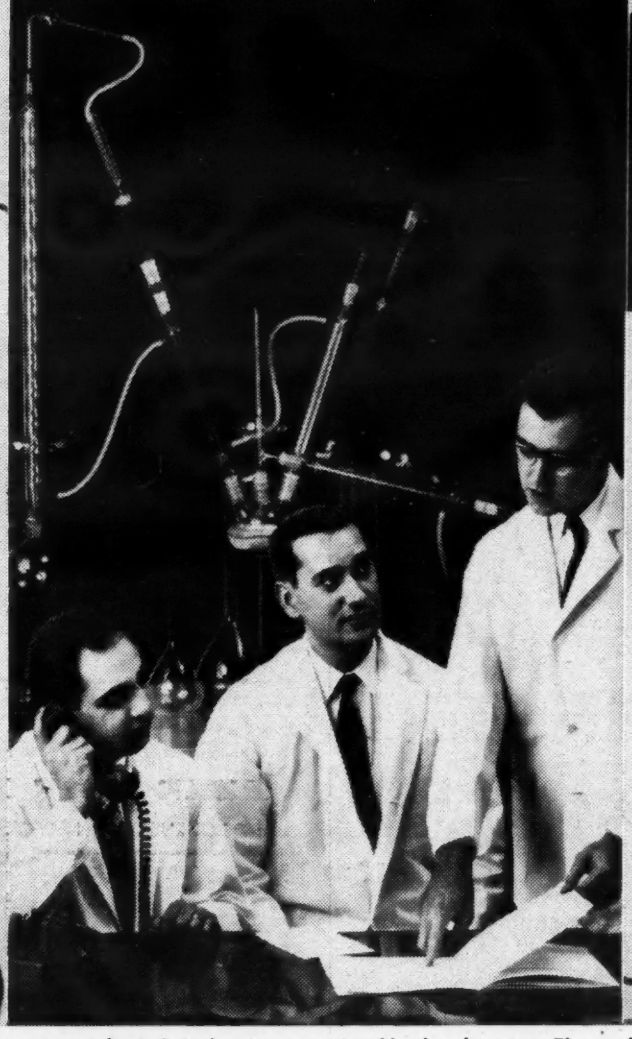

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CLIFTON, New Jersey
Willard K. Thayer
Eastern Regional Manager

SAN FRANCISCO, Calif.
Malcolm K. Nielsen
Western Regional Manager

The regional managers you see here are relaying customer requests for technical assistance to Brooklyn headquarters. The results of one such call are related below:

TECHNICAL SERVICE "ON THE LINE"

Here's how one drug manufacturer took advantage of Pfizer's experience in antibiotics and steroids:

"How can I get a special extraction technique for neomycin in the presence of my ingredient *X*?" a customer of Pfizer's Chemical Division recently asked.

"I can't assay my product for neomycin until I get this solved. It's holding up all my stability tests, and I'll never be able to control production without a reliable assay," was his plea.

The customer had decided several weeks before to go into the growing topical products market with an anti-inflammatory, anti-infective agent containing neomycin, polymyxin and hydrocortisone. Because he'd had little experience with non-systemic antibiotics and steroids, he called Pfizer for help.

At that time, the Chemical Division called in the Technical Service Department who, in short order, supplied the customer information on:

1 **Suggested antibiotic combinations for balanced therapy**
2 **Rationale**
3 **Use levels** 4 **Stability**
5 **Compatible ointment bases**

It was when the drug manufacturer got into making up his experimental samples that he ran into the neomycin extraction problem in the presence of ingredient *X* (his own specialty).

The Technical Service Department worked out the extraction technique. But, they didn't stop there. They went on to run both accelerated and room temperature stability studies on the experimental formulation and check assays on the first production batch for the customer. Now, he's on the market with a successful new topical product. And we've another satisfied customer.

As you probably guessed, we've been trying to show you how you, too, can take profitable advantage of Pfizer's experience in antibiotics, steroids, and vitamins. Just call your local Pfizer representative or write to Chas. Pfizer & Co., Inc., Dept. WP, 630 Flushing Avenue, Brooklyn 6, N.Y.

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Drugs, Fine Chemicals

FDA's ban on further food-use of coal yellows 3 and 4, once current stocks of the colors are depleted, reportedly finds such former consumers as butter and margarine producers looking for a substitute material. More than likely, this search will steer them to beta-carotene, amply available and quite attractively priced. A vitamin A coloring, b-carotene was recently reduced (May 1) approximately 17 percent, with the new listing on pure crystalline material now established at a record-low of $240 per kilo.

Economies resulting from increased production were said to have prompted the substantial price cut, announced almost simultaneously with the effective date of FDA's decree on competitive materials, coal yellows 3 and 4. But this, sources said, was merely a very happy coincidence.

Also, last week, a producer issued a new and lower schedule for n-methyl piperazine, an intermediate in the manufacture of tranquilizers and motion sickness remedies. Replacing the former carload ($6.95) and less carload ($7) breakdown, are new listings of $5 per pound for 10 drums or more and $5.50 a pound for smaller quantities.

With vitamins, it looks as if the trade is still battling price erosion—and not too successfully at that. Eating away at only recently revised schedules, according to reports from observers, are cheaper imports and the willingness of some dealers to share a sizable hunk of their commissions with customers.

Weakness supposedly exists throughout much of the overall vitamin market, but noted last week were instances where pyridoxine hydrochloride (B6) was being traded at $175 per kilo, nicotinamide at $8 and nicotinic acid at $5 to $6 per kilo.

Well, the last US maker of tartrates has sung its swan song. And if speculation be right, the dirge-like strains may be echoing in this market for sometime to come. Already, it has been reported that prices have strengthened appreciably abroad, and some people feel that it is only a question of time before the upward trend is reflected in schedules here.

b-Carotene—New and lower prices for b-carotene, a coloring with vitamin A, went into effect May 1. Schedule was setup as follows:

b-Carotene in vegetable oil, semisolid suspension, 400,000 A units per gram, $57.60 per kilo (formerly $69.60).

Liquid in vegetable oil, 500,000 A units per gram, $72 per kilo (formerly $87).

Pure, crystalline, 1,600,000 to 1,670,000 A units per gram, $240 per kilo (formerly $290).

Economies resulting from increased production reportedly made possible the substantial price cut, which was announced almost simultaneously with the effective date of FDA's ban on further food use of coal yellows 3 and 4, competitive materials. But this, sources said, was merely a happy coincidence.

Coal yellows 3 and 4 have been used traditionally by margarine and butter makers—by the latter to insure a uniform color for their product regardless of the season. But having anticipated FDA's ban, some of these manufacturers have already discontinued use of these colors. Others, however—particularly a number of big butter men in the midwest—will now have to find a substitute. Many, undoubtedly, will turn to b-carotene which is amply available. In fact, the annuncement of the price reduction should steer some of these potential buyers right to the producer's door.

Price Trends

Advanced

None

Reduced

b-Carotene, pure crystalline, 5c. per gram.

Comparative Price Indexes

(100=1949 average)

Last week	Prev. week	Last month	May 9, 1958
60.85	60.85	60.85	63.21

For Current Prices see page 9

n-Methyl Piperazine—A producer has issued a new price schedule for n-methyl piperazine, an intermediate in the manufacture of tranquilizers and motion sickness remedies.

Substituted for former carload ($6.95 per pound) and less carload ($7) quotes are new listings of $5 per pound for 10 drums or more and $5.50 per pound for lesser quantities. Effective May 1, the schedule is written on an f.o.b. plant basis.

Nicotinamide — According to reports from market observers, recent sales of nicotinamine have been made at $8 per kilo, down from the previous $9.50. Competitive pressures were said to be especially sharp here as well as for nicotinic acid business. The latter material, incidentally, has been bringing $6 per kilo but it's believed that some recent sales have been based on a $5 quote for a similar quantity.

Pyridoxine Hydrochloride — The substantial price reduction put through a few months back for pyridoxine hydrochloride (B6) apparently has failed to halt what some of the trade term price erosion. For reports of last week indicated that the vitamin has been traded of late at $175 per kilo, quite a bit below the $190 list.

Behind weakening prices obviously is a stiffly competitive domestic market. Imports, of course, have not helped the situation but these, it's said, have not been large enough to be particularly significant. On the other hand, the willingness of certain brokers to pass on a part of their commission to customers, is considered to be one of the undermining influences.

Santonin—Schedule for santonin NF was revised last week. The base price became $23 per pound.

Tartaric Acid—As announced a week ago, the last of the US tartrate makers has decided to give up on domestic production once-and-for-all, and will now have tartar products manufactured to its specifications in Europe. The firm originally shut down its plant last September, at which time it requested higher tariffs on imported materials.

In response to this petition, hearings were heard by the Tariff Commission who eventually recommended that import duties on both tartaric acid and cream of tartar be raised. This was in mid-January and while the firm said nothing positive, indications were that it intended to resume production once the okay on the higher tariffs was given.

Then, in March, the President rejected the commission's recommendations, and the firm politely announced that it would be forced to quit production.

Drug and Fine Chemical Imports: February

Imports of selected drugs and fine chemicals for the months of January and February, 1959, as reported by the Bureau of Census, were as follows:

		February	*January*
Caffeine	lbs.	84,809	90,273
Camphor:			
Refined	lbs.	9,300	62,000
Synthetic	lbs.	12,460	23,290
Iodine, crude	lbs.	15,431	216,464
Menthol:			
Natural	lbs.	39,632	31,299
Synthetic	lbs.	1,000	20,198
Quinidine & salts	ozs.	5,000	72,655
Quinine sulfate	ozs.	5,000	53,000
Saccharin	lbs.	15,935	29,050
Sodium alginate	lbs.	93,025	69,920
Tartaric acid	lbs.	865,269	512,268
Theobromine	lbs.	3,448	0
Vitamins and vitasterols:			
Animal origin	lbs.	0	326
Other origin	lbs.	43,767	54,719

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Drugs, Fine Chemicals

Now, with no domestic producer, some observers see some cause for alarm. Based on the fact that tartrate markets are strengthening abroad, they feel that prices here will be advanced as soon as large inventories begin to near depletion.

In February, pending the President's decision, imports of tartaric acid reached 865,209 pounds. Of this amount, Italy supplied a whopping 540,941 pounds, Spain 280,716, and France, running a poor third, 44,092 pounds. The previous month, imports amounted to 512,268. And for all of '58, imports totaled a mere—in comparison—2,913,096 pounds.

An interesting sidelight: In England at the present time, the Board of Trade are considering an application for the imposition of anti-dumping duties on tartaric acid imported from Italy, Spain and West Germany.

Botanicals

Two price declines were recorded here last week. Cape aloes were dropped to 32 cents per pound, rhatany root to 14 cents. Both changes, dealers said, coincided with the recent receipt of new crops.

Generally, botanicals markets have been dull, in typical between-seasons fashion. However, relatively active interest, resulting in higher prices, is reported where dealers' stocks are light and new material is not expected immediately.

Aloes—Cape aloes were reduced last week 3 cents per pound, to a range of 32c. to 37c. The price change, dealers said, coincided with recent shipments of new crop. The powdered material was continued at 60c. to 65c. per pound, however.

Curacao aloes are listed at 60c. to 70c. per pound with the powdered grade 20 cents higher.

Arabic Gum—The combination of active interest and light supplies has strengthened arabic prices within the past few weeks. Current quote for amber sorts is 25c. to 26c. per pound, for the USP powder 28c. to 30c. per pound.

Indications that the Sudan's current gum arabic crop will produce a below average yield has been the primary factor behind the rising prices in markets here.

Karaya Gum—A tight supply situation both here and at source has brought prices to higher levels. Karaya No. 1, is now quoted at 48c., No. 2 at 43c. per pound. Demand is reported active.

Rhatany Root—For the second time within a two-week period, dealers here marked down the price of rhatany root. New listing became 14c. to 16c. per pound. Here, too, arrival of new crop precipitated the price change.

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OPD Special Report on Ultraviolet Absorbers

UV Absorbers Light Way to $10 Million Market

—Continued from page 44

finish, the pigment acts as a light-absorber —and thinly-pigmented varnishes or other exterior clears seem to be the only immediate outlet for UV stabilizers.

Another outlet for light absorbers is in the coating of colored photograph prints and transparencies, to prevent the fading of light-sensitive tints.

One of the key non-plastics uses for these materials has developed only recently. This is the protection of fluorescent pigments used in marking paint on aircraft.

Fluorescent paints, unprotected against ultraviolet radiation, degrade rapidly. Hence, an absorber has to be either incorporated into the paint, or into a clear coating to cover the paint, or into both.

Last year, the Air Force alone took a reported 30,000 gallons of fluorescent orange paint, and about 15,000 gallons of clear coating lacquer. Add civilian aircraft use to this total, and it can be seen that a tidy amount of UV absorber was used for this purpose in 1958.

The actual amount of ultraviolet absorber used is hard to guess, and estimates in the industry run as high as 6,000 pounds for use on aircraft.

It's not too clear what's going to happen in the non-plastics field in the future. It could be left in a rut as every effort is made to saturate the plastics field, or it could keep abreast by a few breakthroughs in paint or textile technology.

Looking five to ten years hence in plastice—urethanes, for instance—some observers believe that by that time, isocyanate coatings and elastomers will be produced at the rate of 10 million pounds a year—and require some 50,000 pounds of UV absorber.

But urethane foams won't require UV absorbers, it's believed, and this will be far and away the largest portion of the urethane market. Reasons: Even though foam discolors, the physical characteristics don't change, and most foams are covered by some other material anyway.

Regardless of whether plastics and coatings continue to split up the market between them over the next several years, competition is going to increase among producers. Chances are they'll outdo themselves in two ways:

- They'll find a lot more materials that need protection in the 2,000 - 4,000 Angstrom range of the spectrum.
- They'll battle—perhaps cut prices—for existing consumers.

UV Reprints Soon

This special report on ultraviolet absorbers is being reprinted and copies will be available shortly from OIL, PAINT AND DRUG REPORTER'S Reprint Department, 30 Church street, New York 7 at 35 cents each (discounts on quantities of one hundred). Also in print are these previous OPD "in-depth" studies: Dioctyl phthalate and di-isoctyl phthalate, butadiene, styrene, borax, chelating agents, potash, titanium pigment and sodium bicarbonate.

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Aliphatic Organics

Lower prices were posted the first of May for 1,1,1-trichloroethane, a general purpose cleaning solvent. Dropped 1½ cents per pound across the board, the schedule issued to direct consumers lists tankcar quantities at 12¼ cents per pound, tankwagons at 12¾ cents, and drum carloads at 13¼ cents per pound, all on a delivered basis. Prices to distributors, naturally, are fractionally lower with tankcars and drum carloads at 11.8 cents and 12.85 cents per pound, respectively.

Described as an open-bucket or cold cleaning solvent, 1,1,1-trichloroethane now dominates what once were carbon tetrachloride strongholds. Low toxicity reportedly has been the primary factor behind the chemical's enviable growth rate which, in turn, made possible the recent price reduction.

Production economies as well as the desire to spur new applications development also occasioned two other price declines within the past fortnight. Butyl acrylate was reduced 10 cents, to 45 cents per pound tankcars delivered East, n-dipropylamine to 64 cents, same basis. A still lower price is possible for the former material, it's said, when and if the market expands sufficiently. A sister material, ethylhexyl acrylate, was reduced four times within a twelve month span, to cite an example.

Rumors that a chemical giant is planning to get into synthetic glycerine production were resurrected, dusted off, and recirculated last week. Reportedly, these sprang up initially when the government awarded a certificate of necessity for additional glycerine facilities to the firm in question—and several others, as well—many months ago.

Trade people for the most part aren't taking the rumors too seriously, of course. To some observers, for instance, even the prospect of a third synthetic glycerine maker seems foolhardy, considering the stiffly competitive market where refiners probably have upwards of 50 percent of the business. Also, it appears that there is now adequate glycerine plant capacity to take care of known and projected requirements for some time to come, if not indefinitely. A nice respectable rumor, though . . .

n-Butyl Acrylate—Three producers have announced price reductions for n-butyl acrylate, a basic chemical used in the production of paints, finishes for textiles and leathers, and other industrial products.

New schedules list tankcar quantities at 45c. per pound, carloads at 47½c., and less carloads at 48½c. per pound, freight prepaid in each case. Prices are uniformly 1c. per pound higher for shipments west of the Rockies.

Trade sources said the price reduction is designed to broaden markets for the chemical, till recently referred to as a development item. A further decline is possible, it's said, as demands increase—in keeping with traditional pricing policy. Ethylhexyl acrylate, for example, was reduced four times within a twelve month period.

n-Dipropylamine—A producer recently dropped the price of n-dipropylamine 8c. per pound across the board, setting the tankcar listing at 64c. per pound, the carload at 66½c., and the less carload at 67½c., on a delivered East basis. For shipments west of the Rockies, prices are 1c. per pound higher.

According to a spokesman for the producer, the revision is expected to spur usage and new applications development.

Ethyl Alcohol—February production and withdrawals of industrial alcohol fell below the preceding month's levels and also stacked up less than favorably with February, 1958, performance. However, statistics for March and April, when available, will probably show an increase in withdrawals and a concurrent rise in production during both months, according to reports from several trade members.

Glycerine—It's rumored that a major chemical complex may be considering a new addition to its diverse product line—synthetic glycerine.

At present, there are two big volume synthetic makers, who, with refiners, have adequate plant capacity to take care of known and projected requirements for some time to come, if not indefinitely. Then too, the several producers of refined glycerine probably supply considerably more than 50 percent of total requirements. So the big question arises: Why would any firm want to get into a crowded, highly competitive market.

Basis of the rumors apparently is the certificate of necessity for a glycerine plant issued by the government to the firm in question, among others, within the past two years.

Such a certificate means that the government will underwrite a part of the cost of a new facility, which, of course, must be essential to the nation's defense and security. Obviously, glycerine falls within this category because it gets into explosives. But then, explosives are said to be declining in importance as an end-use for glycerine. So the second question: Is the government about to withdraw said certificates and do the recipients now have to make up their minds once and for all.

It goes without saying that some people could answer both questions. But they weren't about to publicly last week. Of course, until they do, the uninformed will continue to speculate—so seldom does a respectable rumor come along.

Molasses—Markets for feeding cane molasses were weak and prices declined in Gulf, Midwest, Rocky Mountain, and

—*Continued on page 66*

Price Trends

Advanced
None
Reduced
1,1,1-Trichloroethane, ½c. per lb.

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	May 9, 1958
130.57	130.57	130.60	131.25

For Current Prices see page 9

Aliphatics Foreign Trade: February

Exports and imports of selected industrial aliphatic organics for the months of December, 1958, and January, 1959, as reported by the Bureau of Census were as follows:

		February 1959	January 1959
EXPORTS			
Acetone	lbs.	655,431	627,059
Butyl acetate	lbs.	572,410	2,067,508
Butyl alcohol	lbs.	433,024	4,892,425
Ethyl alcohol and methylated spirits	gals.	1,044	7,340
Ethylene Glycol	lbs.	17,064,226	10,993,032
Glycerine, 100 percent basis	lbs.	994,825	562,716
Methyl alcohol	gals.	561,929	1,320,915
Methyl ethyl ketone and methyl acetone	lbs.	290,038	514,932
Propyl alcohols	lbs.	191,876	417,165
IMPORTS			
Acetic acid (over 65 percent)	lbs.	164,073	169,742
Acetic anhydride	lbs.	404,760	152,430
Acetone, MEK and homologues	lbs.	0	0
Amyl alcohol and fusel oil	lbs.	6,560	0
Chloroacetic acid (mono and tri)	lbs.	862,273	597,619
Formic acid	lbs.	200,213	239,281
Glycerine, crude	lbs.	1,318,173	1,612,681
Glycols, their ethers and esters	lbs.	250	20,527
Lactic acid (55 percent or more by weight)	lbs.	9,970	16,244
Tetrachloroethane	lbs.	0	236,950
Trichloroethylene	lbs.	1,357,814	8,296,292
Vinyl acetate, unpolymerized	lbs.	3,902,920	2,954,880
Vinyl alcohol, including derivatives	lbs.	1,053,906	1,201,459

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Agricultural Chemicals

Slow demand has resulted in successively easier prices on dried blood and tankage. Declines last week amounted to 25 cents per unit ton on both blood and tankage at New York and Chicago. There was good demand for bonemeal, but little offered. Castor pomace remained nominal at $35 per ton. There have been no offerings for several weeks, sources said. Hoofmeal was steady and unchanged at $6.75 per unit ton. Demand has been modest.

GSA invited fertilizer manufacturers to again submit bids for supplying India with fertilizer needs for the new year. The agency asked for offers on 16,772 metric tons of fertilizer grade urea or 36,968 metric tons of calcium ammonium nitrate.

The American Potash Institute has reported that deliveries of potash in the first quarter amounted to 898,743 tons of salts equivalent to 523,540 tons of K_2O. The figures represent a decline of three percent in salts, and four percent in K_2O content, for the comparable period last year. Recent weeks have seen the growth of a more optimistic feeling among potash producers, however. Good quantities moved out in the second quarter, it was said.

Report of Business and Defense Services Administration indicated that production of Chilean sodium nitrate in the first three quarters of last year was up slightly, but exports were down about seven percent. The United States continued to be the largest consumer, accounting for about 37 percent of exports. Total sales of fertilizers in Canada increased nearly eight percent in the 1957-58 season, the report said.

No changes have been made in the product itself, but the urea-ammonium nitrate solution marketed by a major producer has taken on a golden hue. The product, trade named "Golden Uran," has been changed from a clear, to a golden color in all grades.

Price Trends

Advanced
None

Reduced
Dried blood, Chicago, 25c. per unit ton.
New York, 25c. per unit ton.
Tankage, Chicago, 25c. per unit ton.
New York, 25c. per unit ton.

Comparative Price Indexes
(100—1949 average)

Last week	Prev. week	Last month	May 9, 1958
112.08	112.15	112.61	109.54

For Current Prices see page 9

Animal and Plant Foods

Ammonia—Production of synthetic anhydrous ammonia in February totaled 326,454 short tons as against 338,805 tons in the previous month and 286,734 tons in February, 1958. Output of by-product liquor was 1,372 short tons in February as against 1,389 tons in the month previous, and 1,103 tons in the comparable month one year ago. Stocks of synthetic, anhydrous ammonia in February totaled 236,344 short tons as compared with 221,581 tons in January.

Ammonium Nitrate—Production of fertilizer grade ammonium nitrate in February amounted to 193,386 short tons as against 207,464 tons in the previous month and 181,686 tons in the comparable month last year. Stocks of ferilizer grade in February totaled 232,894 short tons as compared to 217,270 tons in the previous month, according to Census bureau figures.

Ammonium Sulfate — Production of synthetic ammonium sulfate in February amounted to 87,075 short tons compared with 88,531 tons in January, and 80,777 tons, February, 1958. Production of by-product material in February was 63,817 short tons as against 63,604 tons in the previous month and 48,375 tons in February, 1958.

Stocks of synthetic material at producing plants in February amounted to 91,535 short tons as against 124,355 in January. Stocks of by-product ammonium sulfate totaled 143,609 short tons as against 139,815 tons in January.

Animal Proteins—Dried blood declined 25c. per unit ton. Quotation at Chicago was $6.50 per unit ton, and at New York, $7. Tankage also declined 25c. per unit ton, to $6.50, New York, and $7 per unit ton in Chicago. Demand was moderate. There was good demand for bonemeal, but little was offered. Price remained virtually nominal at $75 per ton. Hoof meal was quoted unchanged at $6.75 per unit ton. Nitrogenous tankage was nominal at $4 per unit ton.

Production of meat meal and tankage declined in 1957-58 for the third straight year, according to Department of Agriculture. Production in 1957-58 amounted to 1,376,000 tons as against 1,496,000 in 1956-57, and 1,546,000 tons in 1955-56. Tankage production last year was down 14 percent.

Castor Pomace—Material remained well sold ahead, according to trade reports. Price was nominal at $35 per ton, f.o.b., works.

Potash—Sources feel current low level prices preclude any reductions in this market. Potash is one of the few materials that has not adequately reflected increased costs in recent years, it was said. On the other hand, competitive conditions make it unlikely that an advance could take place. The peak of the season was past, but suppliers said they were moving good quantities of potash.

Deliveries of potash for agricultural chemical purposes in the continental United States during the first three months of the year amounted to 495,484 tons K_2O, according to figures of the American Potash Institute. In addition, Canada took 21,433 tons; Hawaii, 4,629; Puerto Rico, 1,500; and Cuba, 494 tons. Exports to other countries amounted to 59,438 tons during the three month period, the Institute said.

A research project now underway at Perdue University will concern itself with the manner in which soil moisture affects the availability of potassium. The objects of the study are to investigate the relation between moisture content of the soil and movement of potassium from a non-available form to an available form, and to develop a method for predicting what response a crop will give to applied potassium.

Superphosphate — The total production of superphosphate and phosphatic fertilizers in February was 234,758 short tons as against 225,616 in the previous month, and 210,399 tons in the comparable month last year.

Production of normal and enriched during the month was 129,857 short tons as compared with 125,424 in the previous month and 116,949 tons in the corresponding month of 1958.

Output of concentrated superphosphate in February amounted to 78,213 short tons, 74,721 tons in the foregoing month, and 70,835 tons in the corresponding month last year.

Total shipments of superphosphate and other phosphatic fertilizers during February was 174,067 short tons, an increase of 3 percent over the comparable month last year. Stocks at producing plants were 1 percent less than those held at the end of January.

Pesticides

Benzene Hexachloride—It was early as yet to say what the demand pattern would be on this material. Competition from toxaphene and malathion and the parathions, has been on the increase in recent seasons. The competitive conditions of the market have kept a check on prices, trade sources said. Consequently, profit margins have come under increasing pressure as operating costs have moved up.

It was pointed out that reduced acreage and light boll weevil infestation last year resulted in listless demand from cotton producing areas of the country.

DDT — Increased government buying has contributed good support in this market. Buying for government programs in the first quarter was estimated to be about 57 million pounds. The domestic market was routine. Prices were unchanged from previous report.

Malathion — Material was moving in moderate volume. The active consuming season was still ahead, and sources expected a continuation of the growth trend on the chemical insecticide. Use in the protection of the South's cotton crop was said to have shown a good increase in recent seasons.

Oils, Fats and Waxes

Stronger tone in edible vegetable oils prevailed last week as a result of increased prospects for exports to the Argentine and other European countries. Prices advanced fractionally for cottonseed, corn, peanut and soybean oils. The Argentine, as a result of floods has lost considerable part of its vegetable oils supply and the US government has now assumed a policy of making available its stocks of edible vegetable oils to that country under PL 480. Issuance of authorization for about 75,000 tons of edible oils is expected within the next few weeks, according to reports from Washington.

Crude coconut oil continued in strong position. Stocks on spot New York were scarce and lifted ½ cent per pound. The market on the Pacific coast was unchanged and firm. Copra was scarce and moved at a fractional advance.

Tallow and greases were quotably unchanged and steady, despite limited volume of business. Offerings continued light and were closely held. Cash lard was unsteady and slightly lower.

Brazilian castor oil continued to move upwards, with trading noted at ¼ cent higher for prompt delivery, New York. Stocks here were closely held, reflecting the scarcity of nearby shipments from Brazil.

Higher primary markets further advanced the local palm oil market. Spot stocks were lifted ½ cent per pound. The senate finance committee has approved legislation to suspend the 3 cents processing tax on palm and palm kernel oils and fatty acids derived thereof until June 30, 1960. A similar measure has passed the house. The bill now goes to the senate.

Price Trends

Advanced

Castor oil, Brazilian, ¼c. per lb.
Coconut oil, crude, New York, ½c. per lb.
Beeswax, refined, 2c.-3c. per lb.
Copra, $5 per ton.
Corn oil, crude, ½c. per lb.
Refd., ½c. per lb.
Tanks, ½c. per lb.
Cottonseed oil, crude, ½c. per lb.
Refd., ⅝c. per lb.
Palm oil, drums, ½c. per lb.
tanks, ¼c. per lb.
Peanut oil, crude, ¼c. per lb.
Refd., ¼c. per lb.
Soybean oil, crude, ¼c. per lb.
Refd., ¼c. per lb.

Reduced

Cottonseed meal, $1 per ton.
Lard, cash, 1/5c. per lb.
Linseed meal, $2 per ton.
Peanut meal, $3 per ton.

Comparative Price Indexes

(100—1949 average)

Last week	Prev. week	Last month	May 9, 1958
112.66	113.90	115.24	117.07

For Current Prices see page 9

Vegetable Oils

Castor—No. 1 Brazilian was stronger with sales reported at 15¾c. per pound, and ranged to 16c. tankcars, New York, prompt delivery, as to seller. Domestic grades remained steady and unchanged.

Imports of castor beans and castor oil at New York and Philadelphia last week were as follows:

	Pounds	
	Castor Beans	Castor Oil
Last week	1,250,000	1,600,000
Previous week	.....	2,300,000
Corresponding week, 1958	.....	1,176,000
Total this year	11,590,300	30,810,000
Corresponding period, 1958	8,769,700	33,375,750

Coconut — Crude continued scarce and higher. Tankcars were maintained at 20½c. per pound, f.o.b. Pacific coast, May and June shipment. The New York market was firmer at 21¾c. per pound, tankcars, spot and 21½c., June delivery. Arrivals of coconut oil at New York last week amounted to 1,052 tons from Rotterdam and 537 tons from Cebu for delivery against contracts.

Corn—Crude was higher with cottonseed oil. Sales were made at 12⅞c. per pound, tankcars, f.o.b. mills, prompt shipment and 13c. asked. Refined was raised to 16.60c., tankcars, New York basis.

Cottonseed — Futures continued to advance last week reaching new highs for all positions as a result of improved export news, and the disposal of the balance of refined cottonseed oil owned the government. The government sold 18,000 tons of refined oil at 13.32c. per pound, f.o.b. Houston for export. Trading in futures was active and May tenders were increased to 207 contracts and stopped.

Italy was authorized by ICA to purchase 27,000 tons of vegetable oils for shipment by the end of July. Reports from Washington indicated that an authorization under PL 480 for the shipment of about 75,000 tons of vegetable oils to the Argentine was expected to be issued shortly.

Cash oils were stronger and higher. Re-

Cottonseed Oil Futures

Sales and prices of prime summer yellow cottonseed oil futures in tankcars (60,000 pounds) on the N. Y. Produce Exchange for the week ended Friday, May 8, follow:

	Sales	High	Low	Close
		Cents per pound		
May	337	14.07	13.69	14.08@14.09
July	836	14.17	13.80	14.03@14.04
Sept.	486	14.01	13.70	13.82S
Oct.	26	13.58	13.25	13.43S
Dec.	212	13.35	12.97	13.11S
March	29	13.44	13.10	13.20@13.40
May (1960)	5	13.30	13.20	13.20@13.30

Total sales and switches, 1,931 contracts.

Oils and Fats: March

Following statistics are compiled by the Bureau of Census covering oils and fats production, consumption and factory and warehouse stocks in March, 1959 (in millions of pounds).

	Crude vegetable, animal fish oils			*Refined vegetable oils*[1]	
Fats and Oils	*Production March 1959*	*Consumed in Refining March 1959*	*Warehouse Stocks March 1959*	*Production March 1959*	*Warehouse Stocks*[2] *March 1959*
Castor oil[3]	(D)	xxx	22.5	xxx	xxx
Coconut oil[3]	28.9	28.2	37.1	26.1	10.1
Corn oil	25.5	26.8	18.7	25.1	9.2
Cottonseed oil	160.6	124.1	182.7	116.8	294.5
Linseed oil	[4]37.3	15.3	[5]110.2	(NA)	[6]42.4
Palm oil[3]	xxx	xxx	[7]10.7	xxx	xxx
Palm kernel oil	.	3.6	1.7	3.1	2.4
Peanut oil[3]	8.3	7.4	9.5	7.1	7.6
Soybean oil	380.8	315.2	250.6	303.8	225.4
Tall oil	59.6	(D)	113.6	12.0	13.8
Tung oil	7.0	xxx	61.5	xxx	xxx
Vegetable oil foots	20.0	xxx	49.0	xxx	xxx
Edible tallow	25.3	xxx	[7]29.8	xxx	xxx
Inedible tallow and grease (other than wool)	221.6	xxx	[7]294.4	xxx	xxx
Lard[3]	218.0	xxx	[7]132.2	xxx	xxx
Fish oil[3]	0.2	xxx	46.4	xxx	xxx
Marine mammal oil[3]	....	xxx	61.2	xxx	xxx

NA Not available.
D Withheld to avoid disclosing figures for individual companies.
Note: Consumption of oils in products (shortening, margarine, etc.) will appear shortly in Facts for Industry Series M20K-2, "Fats and Oils, Production and Consumption in Selected Products; Factory and Warehouse Stocks."
[1] Usage of crude oils in refining (alkali or caustic washing) is shown only for major vegetable oils. Production of refined oils covers only once-refined oil. Separate data on crude and refined oils are no longer collected for oils other than those specified. Degummed soybean oil is reported as crude oil.
[2] Includes hydrogenated fats (vegetable and animal) and other fats and oils "in process," (e.g. refined cottonseed oil includes stocks of stearin, hydrogenated or otherwise).
[3] Stocks of palm, crude coconut, crude castor and sperm oil are on a commercial stocks basis; do not include stockpiles of strategic oils.
[4] Production of raw linseed oil.
[5] Includes raw and boiled linseed oil.
[6] Includes linseed oil other than raw and boiled.
[7] Includes refined.
[8] Data on production and stocks of peanut oil at crude oil mills and production of lard collected by U. S. Department of Agriculture. Data for fish oil producers collected by Fish and Wildlife Service, U. S. Department of Interior.

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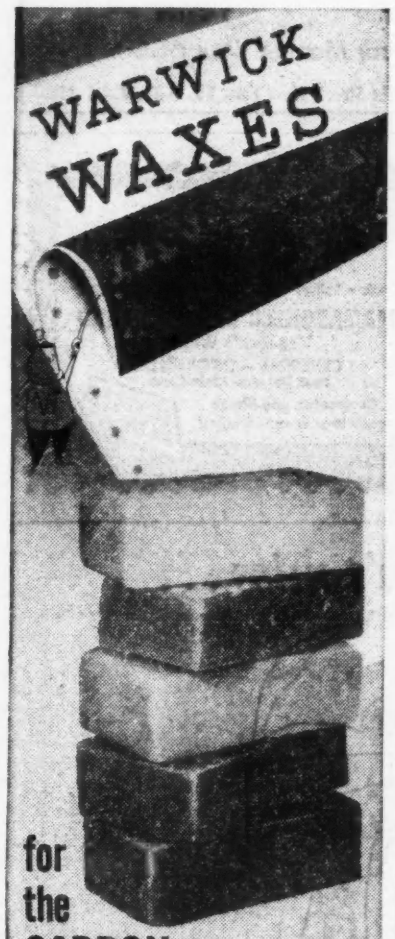

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Oils, Fats and Waxes

fined salad oil was raised to 15⅜c. per pound, tankcars, New York, prompt delivery. Crude oil was scarce and advanced fractionally. Tankcars were lifted to 12¼c. per pound, f.o.b. mills in the southeast; 12½c. Valley and 11¾c., nominal, Lubbock and Waco.

Olive—Shipments were steadier. Tunisian oil ranged from $57 to $58 per 100 kilos, drums, c and f New York, as to quality and quantity. Spanish oil was maintained at $57, same basis, f.o.b. shipping port. Tunisian oil on spot was higher with sales at $2.35 to $2.40 per gallon, spot, duty paid and Spanish, $2.45 to $2.50, spot as to quantity.

Palm—Further increase in the cost of replacements, was reflected locally and drums advanced ½c. and tankcars, ¼c. per pound. Business was light and spotty. Drums ranged from 15¾c. to 16¾c. per pound, spot and tankcars, 13.15c. prompt delivery.

Peanut—This market was firm. Crude was sold at 13½c. per pound, tankcars, f.o.b. mills, prompt shipment and 13¾c. asked. Refined was quoted at 17¼c. tankcars, New York basis.

Soybean—Crude was stronger reflecting the strength of cottonseed oil. Sales were made up to 9⅜c. per pound, tankcars, Decatur, unrestricted, May delivery, with 9½c. generally asked. Refined salad was higher at 11⅝c. per pound, tankcars, New York, prompt delivery.

Tung—New business was light, but consumers absorbed larger volume against former contracts. Market was firm at 23c. per pound, tankcars, New York, prompt delivery. Drums were held at 24½c. to 25c. spot, according to quantity. Domestic oil was unchanged at 22c. tankcars, f.o.b. mills.

Miscellaneous

Copra—Offers for shipment were scarce and slightly higher. Prompt shipment was sold at $267.50 per ton, c.i.f. Pacific coast and raised to $270.

Fats and Greases

Greases—Moderate trading was reported for prompt delivery. Prices steady. Yellow grease ranged from 6¾c. to 6⅞c. per pound, tankcars delivered. Choice white, all hog was held at 7⅝c. same basis against bids of ⅛c. less.

Lard—Cash lard continued unsettled. Trading was light. Drums were slightly lower at 9.8c. per pound, Chicago basis.

Tallow—Trading continued spotty and confined to prompt needs. Market tone remained steady. Bleachable fancy ranged from 7¼c. to 7⅜c. per pound, tankcars, delivered; prime, 7⅛c. to 7¼c.; special, 7c. to 7⅛c. and No. 1, 6¾c. to 6⅞c., same basis. Edible tallow was quoted at 9⅛c. to 9¼c., same basis. Guaranteed fancy was quoted at 8⅝c. per pound, drums, f.a.s. and 7.8c., bulk.

Cake and Meal

Cottonseed Meal—Business was confined to small lots for spot delivery. Meal 41 percent was lower at $62 per ton, sacked, Memphis and $57 in the southeast.

Linseed Meal—Slow demand and increased offerings weakened the market. Extracted meal dropped $2 and was quoted at $70 per ton f.o.b. Minneapolis, prompt delivery. Expeller meal was not offered.

Peanut Meal—Increased supplies weaken the market. Meal, 45 percent declined to $56 per ton, sacked, f.o.b. Alabama and Georgia mills.

Soybean Meal—Trading was restricted to nearby delivery. Prices were unchanged and steady. Meal, 44 percent was held at $55 per ton, bulk, Decatur, unrestricted for prompt shipment.

Waxes, Vegetable

Increased cost of crude beeswax replacements stiffened refined grades and quotations were raised 2c. to 3c. per pound. Refined yellow slabs were higher at 58c. to 59c. per pound and bleached white at 69c. to 71c. per pound, as to quantity, spot delivery. Crude beeswax was strong and higher, but refiners refused to follow the market upwards. Consuming demand continued restricted to actual requirements for all of vegetable waxes. Carnauba grades were unchanged and steady. Offers from Brazil were light and firmly held at price support levels.

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Essential Oils, Aromatics

Nothing was certain in the essential oils markets last week, except uncertainty itself. Prices rose and fell, many of them for no apparent reason. To begin with, clove bud oil dropped 15 cents per pound, but this does not indicate that the situation in Madagascar is any more stable or predictable than it has been since the storms some six weeks ago. One dealer admitted that his company has fortunately contracted for a boatload of clove bud oil just a matter of days before the storms struck and now this prize shipment is ready for sale.

The second most startling decline is noted in the spearmint market. One dealer, to the consternation of the others here in New York, has lowered his spearmint 50 cents per pound. Dealers generally agreed that it would go down, but none expected such a drop.

Other declines were: cardamom, $3 per pound; chenopodium, 20 cents per pound, and Dalmation sage, 10 cents per pound.

The lone rise in the essential oils last week was clove leaf which went up another 10 cents per pound.

In the aromatic chemicals division, two startling changes were noted, both of them clove oil derivatives. Isoeugenol, for instance went up 55 cents per pound while benzyl isoeugenol dropped 35 cents per pound. Obviously, the storms in Madagascar six weeks ago were responsible for the rise, and, perhaps, indirectly for the decline. Even though the future supplies of the clove oil derivatives may be uncertain, some dealers may have, on hand, ample stocks which they wish to move even though replacements will be difficult to obtain.

The seeds and spices market, once again, was characterized by high source prices and relatively low spot prices.

Price Trends

Advanced

Cardamom seed, Alleppey Green, 5c. per lb.
Clove leaf oil, 10c. per lb.
Isoeugenol, 55c. per lb.
Pepper, red, Mexican, 2c. per lb.

Reduced

Anise oil, USP, 25c. per lb.
Benzyl Isoeugenol, 35c. per lb.
Cardamom, NF, 3.00 per lb.
Cassia seed, Batavia & Korintje "A," 1c. per lb.
"B," ½c. per lb.
"C," ½c. per lb.
Chenopodium oil, NF, 20c. per lb.
Clove bud oil, 15c. per lb.
Fennel seed, Yugoslav, 1c. per lb.
Indian, 1c. per lb.
Mace, Siauw No. 1 Prime, 15c. per lb.
No. 2 Whole, 5c. per lb.
No. 2 Siftings, 5c. per lb.
Nutmegs, West Indian, 5c. per lb.
East Indian, 7c. per lb.
Paprika, Yugoslav, 1c. per lb.
Sage oil, Dalmatian, 10c. per lb.
Spearmint oil, NF, 50c. per lb.

Comparative Price Indexes

(100—1949 average)

Last week	Prev. week	Last month	May 9, 1958
146.14	146.69	145.91	145.30

For Current Prices see page 9

Essential Oils

Bois de Rose — Informed sources here said that both the Peruvian and Brazilian types of this oil were likely to strengthen as warm weather approaches. The previous quotation, $1.80 per pound, remained unchanged last week, although dealers here anticipate a higher source price, hence a higher spot price. Rise in price, if it occurs, will be attributed to an increase in demand rather than a short supply, these sources said.

Cardamom — This oil declined in price $3 per pound from the previous quotation of $45 per pound to $42.

Chenopodium—This oil dropped 20c. per pound last week, from $4.35 per pound to $4.15 per pound.

Citronella — The previous quotation for the Ceylon type of citronella remained unchanged last week. It was 54c. per pound in drums. Prospects for the future, however, are quite uncertain. According to a report received here recently, the citronella growers of Ceylon are turning to coconut as a means of livelihood because their citronella plantings have not been bringing them good returns. For this reason, the Ceylon government has encouraged some 50,000 growers to switch over to coconut, copra and fiber.

The government, according to the report, has already spent one million rupee to subsidize the growers' first efforts. This is equivalent to $211,800.

Just how this big switch will effect the overall picture of citronella from Ceylon, is anybody's guess.

By way of comparison, the Java type of citronella was quoted last week at 52c. per pound in drums. Some dealers, however, sell both types of the oil for the same price.

Clove Bud—The downward trend of this oil noted last week does not indicate an easing of the shortage caused when storms struck the island of Madagascar six weeks ago. It is, rather, an indication of one dealer's good luck. A trade source said his company had contracted for a boatload of clove bud oil a matter of days before the storms and now this large shipment is ready for sale. The price he quoted, $2.75 per pound, is a good 15c. lower than other New York dealers.

The clove bud situation at source, however, is still uncertain. According to informed sources here, the damage has not yet been ascertained but rumors indicate the crops were almost totally destroyed as well as drums of the oil which had already been processed. And, it is because of the uncertainty and the shortage, that shipments are few and small.

Another dealer here, low on supply of clove oils and their derivatives, would venture no guess as to the future price situation. It was explained that price lists were being revised, but that no matter how high price and demand climb, the firm won't be able to sell clove products simply because they have none.

Clove Leaf—From its price two weeks ago of $1.15, this oil from Madagascar has climbed to $1.25 per pound. This, however, is a conservative jump as most of the dealers whose prices are represented in this report indicate that they have upped their quotations to $1.40. Just how much higher the price will go is as uncertain as reports of the damage the storms did to the island of Madagascar six weeks ago. So far, no concrete statements have come from the island as to the dollar loss due to the inclement weather.

Sage—The Dalmation variety, long a constant at $3.70 per pound, last week dropped to $3.60 per pound.

Spearmint—Three weeks ago, this publication reported that spearmint price, at source, was some 10 percent weaker. Last week, this weakening manifested itself in the spot price quotation. From the previous quotation, $5.75 per pound, spearmint fell 50c. to $5.25 per pound. Such a price drop, however, was not agreed upon by all dealers in New York. Some of them expressed great shock that spearmint should take such a nosedive. They said they felt that this new lower price would not be in effect for any length of time.

Aromatic Chemicals

Benzyl Isoeugenol—Contrary to what might be expected, this clove oil derivative showed a decline last week. From the previous quotation, $9.85 per pound, it dropped 30c. to $9.50 per pound. On the other hand, isoeugenol rose 55c. per pound, from $3.85 to $4.40 per pound.

Eugenol — The technical grade, used primarily to prevent skinning in inks remained firm at $1.45 per pound although a strong dealer in this aromatic anticipates a rise in price. The USP grade also remained firm. Its price was $1.90 per pound.

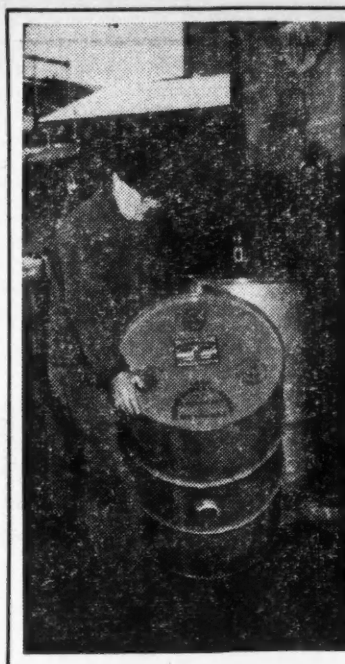
Heliotropin — Following its rise two weeks ago, this ocotea cymbarum derivative continued a strong market last week. It was quoted at $2.50 per pound.

Isoeugenol—A striking reflection of the Madagascar storms some six weeks ago, showed up last week in this clove oil derivative. From its rather constant high of $3.85, it rose 55c. to a strong $4.40 per pound. Further price rises may ensue, dealers speculated.

Rhodinol — This geranium oil derivative was firm last week following its $3.50 per pound rise two weeks ago. It was quoted at $42 per pound, although several dealers have successfully upped their price to $44 per pound.

Safrol—At 70c. per pound, safrol is a weak market, even though its parent

—Continued on page 59



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Coatings Materials

Firmer prices of Argentine casein reflected the tight supply position of that material and good demand for it in Europe. While local buyers still showed only fair interest, those who bought paid ½ cent more than a week ago and 1½ cent above the offering prices that prevailed at the start of last month. Also firm were Congo No. 3 copal gum and East India batu bold dammar, both up ¾ cent per pound, both advances the result of a firmer listing at source. A neighbor of the gum market, shellac, held steady at quotations established this time last year when floor prices first went into effect. Observers see that market quite stabilized now and thereby better able to compete with synthetic materials.

Basic prices of zinc oxide have been steady even longer than has shellac, but, as noted in this space a week ago, producers have made some peripheral adjustments. On the west coast, where the influx of foreign oxide had leveled acute pressure on the market, a standard differential of 1 cent per pound as against Eastern prices was liquidated so as to make the domestic product more competitive. Also, a new bracket was introduced at all shipping points, pricing l.c.l., orders of 10 tons or more at levels ½ cent below those previously covering anything smaller than carlots. While technically this was not a price reduction, it must feel like one to anyone buying within that bracket. Zinc oxide, by the way, is getting good call from its rubber outlet by way of heavy output of truck tires, which may be seen from the data appearing further on in this report.

The paint industry as a whole staged a slight retreat in February from the excellent pace of a month earlier, according to the latest figures from Washington quoted in the table below. The record for February in both output and sales was nevertheless judged to be very good for this time of the year.

Lead oxides were lifted ½ cent per pound across the board late last week to reflect higher lead.

Price Trends

Advanced

Casein, imp., Arg., ½c. per lb.
Congo copal gum, No. 3, ¾c. per lb.
Dammar gum, East India Batu, bold, ¾c. per lb.
Lead, red, ½c. per lb.
Litharge, ½c. per lb.
Orange mineral, ½c. per lb.

Reduced

None

Comparative Price Indexes

(100=1949 average)

Last week	Prev. week	Last month	May 9, 1958
103.03	103.02	193.05	101.44

For Current Prices see page 9

Prime Pigments

Cadmium Colors — The price reductions recently reported here have become standard throughout the trade. Pure cadmium colors, now 10c. lower, list at $5.35 per pound for dark shade, $4.45 for light, $5.10 for medium light, $4.70 for orange-red and $3.65 for yellow.

Cadmium-mercury lithopones are newly quoted at $1.58 per pound for deep orange, $1.88 for dark red, $1.65 for light red, $1.80 for medium red, $1.70 for medium light red, and $1.96 for maroon, while the selenides are revised to $1.51 for orange, $1.81 for light red, $1.93 for medium light red, $2.16 for medium red and $2.49 for dark.

This reduction, the first to occur for the group in quite some time, was touched off by last month's 15c. decline in cadmium metal.

Chrome Colors—Production of all three types of chrome color showed a substantial advance in February over the same month of last year, but the comparison with January was mixed, with only a slight gain in overall output, which came to 2,673 tons this February as against only 2,211 tons a year earlier and 2,585 in January.

Individual output for February was tallied at 306 tons of chrome oxide green, 1,891 tons of chrome yellow and orange, and 476 of molybdate chrome orange. Respective figures for a month earlier were 305, 1,773 and 507 tons, and for a year earlier, 279, 1,602 and 330 tons. Overall stocks stood at 3,786 tons on February 28 as compared with 3,839 on January 31, which leads one to assume that shipments for the month exceeded output.

Lead Pigments — Quotations were advanced ½c. per pound to reflect higher lead. Under the new schedule, 95 percent lead is moving at 14¼c. per pound, 97 percent at 14.45c., 98 percent at 14.60c., litharge at 13¾c. and orange mineral at 15.60c., carlots.

Sales of red lead, stimulated by construction activity, have climbed to a respectable level, but nothing spectacular, while white lead has received brisk interest from the house paint trade. Supply, sufficient all around, reflects the easy availability of lead metal.

Zinc Pigments—Basic prices have been steady and unchanged for several years, but, as reported in this space a week ago, producers recently made some peripheral adjustments. On the West Coast, where an influx of foreign material was putting acute pressure on the market, the standard 1c. per pound differential as against Eastern prices was liquidated. Also, all shipping points were given a new bracket covering l.c.l. shipments of 10 tons or more at prices ½c. below those that previously applied to all l.c.l. orders. While the latter move is technically not a price reduction, it amounts to as much for shipments falling within the bracket.

A report on natural rubber, one of zinc oxide's major consuming outlets, indicates that sales volume in that industry has been spurred to a high level this season by heavy output of truck tires. For the first quarter of 1959, output of 309,000 vehicles was reported, the best record since 1956 and 80,000 units higher than for the comparable period of last year. The significance of these figures may be measured against the fact that 200,000 trucks consume as much natural rubber as 2,750,000 passenger automobiles.

Overall consumption of natural rubber during the first quarter was tallied at 149,418 tons as opposed to only 117,499 for the same period last year. An estimate for all of 1959, made by the Natural Rubber Bureau, looks forward to a total intake of 525,000 tons as against last year's 480,000.

Natural Resins

Copal Gum—Congo No. 3 has been advanced ¾c. per pound to reflect a firmer listing at source. The material now sells at 16½c. to 19c. per pound in bags. Dealers reported the other congos unchanged at 25c. to 26c. per pound for No. 1 and 22c. to 24c. for No. 2.

Dammar Gum—A solitary price change was reported last week, the first in some time. East India batu bold, previously selling at 13¾c. to 15c. per pound, was advanced ¾c. to 14½c. to 16½c. An advance at source triggered the move.

January was a slow month, but since then the sales pace has been relatively good, turing brisk, in fact, during the past

Coatings Shipments, Output: February

	Factory shipments Dollars		Reported productions Gallons	
	†January	February	†January	February
Trade sales	$75,100,000	$71,100,000	26,700,000	26,800,000
Industrial sales, total	49,500,000	48,500,000	22,100,000	24,500,000
Paint and varnish	33,900,000	33,400,000	15,200,000	15,000,000
Lacquer	15,600,000	15,100,000	6,900,000	6,500,000
Overall totals	$124,600,000	$119,600,000	*48,800,000	*48,300,000

Total sales, Jan.-Feb.—$244,200,000.

* Detail does not add to total because some respondents reported only total production without indicating allocation as to trade or industrial outlets.
† Revised.

Coatings Materials

several weeks. Adequate stocks are on hand to meet all needs, dealers report.

Shellac—This market has livened up from time to time, but overall volume for the current season is rated not much better than fair. The occasional spates of brisk buying have been credited to the coatings trade, which is seasonally active.

Orange grades were available at 36c. to 39c. per pound for No. 1, 35c. to 37c. for No. 2 and 32c. to 34c. for superfine. With buyers showing no interest in TN, none is being stocked at present.

Bleached sold at 46c. per pound for bonedry and 56c. for fully refined in bags, 1,500-lb. lots. Supply was fully adequate.

Synthetic Resins

The following figures show production in pounds for February and list January's figures for comparison, as reported by the Tariff Commission:

Production

	*January	February
Phenolic and other tar acid resins:		
Molding resins	17,241,585	16,740,057
Laminating resins	10,747,109	10,496,524
Protective coating resins, modified, unmodified, except by rosin	2,434,845	2,252,079
Urea and melamine resins:		
Protective coating resins, straight modified	3,006,770	2,607,037
Styrene resins:		
Protective coating resins, straight modified	8,029,230	6,899,412
Vinyl resins:		
Total all types	83,658,604	83,682,327
Alkyd resins for protective coatings:		
Phthalic anhydride types, unmodified	20,485,261	20,201,818
Modified with tar acids, rosin and/or other material except styrene	6,293,286	6,050,190
Polybasic acid types except phthalic:		
Unmodified	608,660	524,156
Modified with tar acids, rosin and/or other materials except styrene	1,204,733	957,707
Rosin modifications for protective coatings:		
Rosin, rosin esters, unmodified (ester gums, esterified with glycerol)	1,093,331	902,990
Esterified with other alcohols, pentaerythritol, glycols, etc.	889,928	908,192
Modifications with phenolic and other tar acid resins	1,911,024	2,243,159
Modifications with maleic and fumaric acids	2,790,906	2,214,620
All other modifications	3,783,530	3,925,193
Coumarone—indene and petroleum polymer resins	20,186,878	21,403,604
Miscellaneous synthetic plastics and resin:		
Materials, including silicone resins	18,302,955	17,947,719

* Revised.

Miscellaneous

Casein—Further strength was apparent in the Argentine last week, reflecting the concurrence of adverse weather and brisk European demand. Quotations in the American market were advanced to 19¼c. to 19½c. per pound for forward shipment, or about ½c. higher than the previous week's level. Polish was still available and underselling Argentine fractionally to 1c. per pound.

France's notification that it will be submitting offers later this month for June and July shipment has aroused considerable curiosity in the trade as to how much will be available and whether it will be priced so as to compete with Argentine. Both questions can only be guessed at since the former depends upon unpredictable weather conditions and the latter on what sort of subsidy the government of France will decide to allot exporters.

Naval Stores

Rosin, Gum
(USDA, per 100 lbs.)

	Fri. May 1	Mon. May 4	Tues. May 5	Wed. May 6	Thurs. May 7
Drums—					
K	$8.65[1]	...	...	...	...
M	...	...	...	$9.34	...
N	...	...	...	8.31	...
WG	9.08[§]	...	$8.84	8.66	...
WW	8.76[§]	...	9.02	...	...
Bags—					
K	8.60[1]	...	...	...	$8.35
M	...	...	...	...	8.35
N	...	...	...	...	8.35
WG	...	...	...	...	8.60
Sales, USDA	314*	240*	613*	743*	80*

Tankcars (for week ended May 7)—
K or better, $8.00; M or better, $8.00.

New York
(Per 100 lbs., c.l., Friday)
WW, $10.40; WG, $9.85; K-M, $9.75.

Turpentine, Gum
(USDA, per gal., 7.2 lbs.)

Price	...	.5325	.535[§]	.533	.5325
Sales	...	4,000[¶]	20,000[¶]	24,000[¶]	16,000[¶]

* Drums equivalent, ¶ Gallons, [1] Average price. [2] Or better. [§] Sales confined to tankcar.

Pine Gum—For the week ended April 25 the average price per standard barrel of commercial crude pine gum was reported at $25.16 as compared with $25.30 the previous week and $24.12 a year ago. The volume of gum deliveries to plants was tallied at 9,983 barrels as against the previous week's 7,125 and 8,583 a year ago. Content per barrel averaged 10.03 gallons of turpentine and 296.4 pounds of rosin. Gum grading percentages ranged as follows: WW, 7; WG, 20; N, 44; M, 17; and K and below, 12.

Antibiotics Becoming

—Continued from page 4

germs"—E.coli, pseudomona, proteus, aerobacter, and others—normally found living harmlessly in the bowels and other organs, and whose main function is to cause the decay of dead materials.

These now cause increasing numbers of deaths, Dr. Finland warned, in contrast to 1935 (pre-antibiotic) when fatalities from them were almost unknown.

Dr. Finland advanced two theories to account for the dangerous turn taken in the nature of these germs:

- Human resistance to infection may be lowered in recent times because fewer infections are around to give people natural immunity to germs. (He didn't feel this possibility was a likely one.)
- The previously "harmless" drugs may have been held in check by substances secreted by the killer germs, like streptococcus and pneumococcus. With the latter destroyed by antibiotics, the natural barriers to these so-called "sewage germs" have been broken.

Essential Oils

—Continued from page 57

product, ocotea cymbarum is constantly rising in price. The reason, according to reports from dealers here, is that imported saffron is cheap and may be substituted for safrol in many end-uses.

Seeds and Spices

Cassia — Small available stock for prompt shipment and increased demand have upped the value of cassia. And according to dealers here, a steady rise is foreseen. Little replacement buying is likely because of the high source prices.

Ginger—With the recent reduction in price for Cochin and African ginger, buyers appear once again to show interest.

Pepper—Source prices at India and Singapore are considerably higher than spot prices and demand is low so shipment buying has been curbed. Buyers will probably not acquire any new stocks until the demand increases, thereby raising spot prices. According to reports, Singapore is eager to sell, but refuses to meet the level of spot prices.

Nopco Chemical Buys

—Continued from page 4

who become vice-presidents, and Nopco assistant secretary Julius J. Denzler, who assumes the responsibilities of assistant secretary. Mr. Desmond will be treasurer and Mr. Pfister secretary in the new organization.

Jacques Wolf salesmen, many of whom are long-time employees of the company, remain as Wolf representatives in their established territories.

Jacques Wolf offices, laboratories, and some manufacturing facilities are located in Clifton, while the main plant is on a 13-acre site at Carlstadt, N.J.

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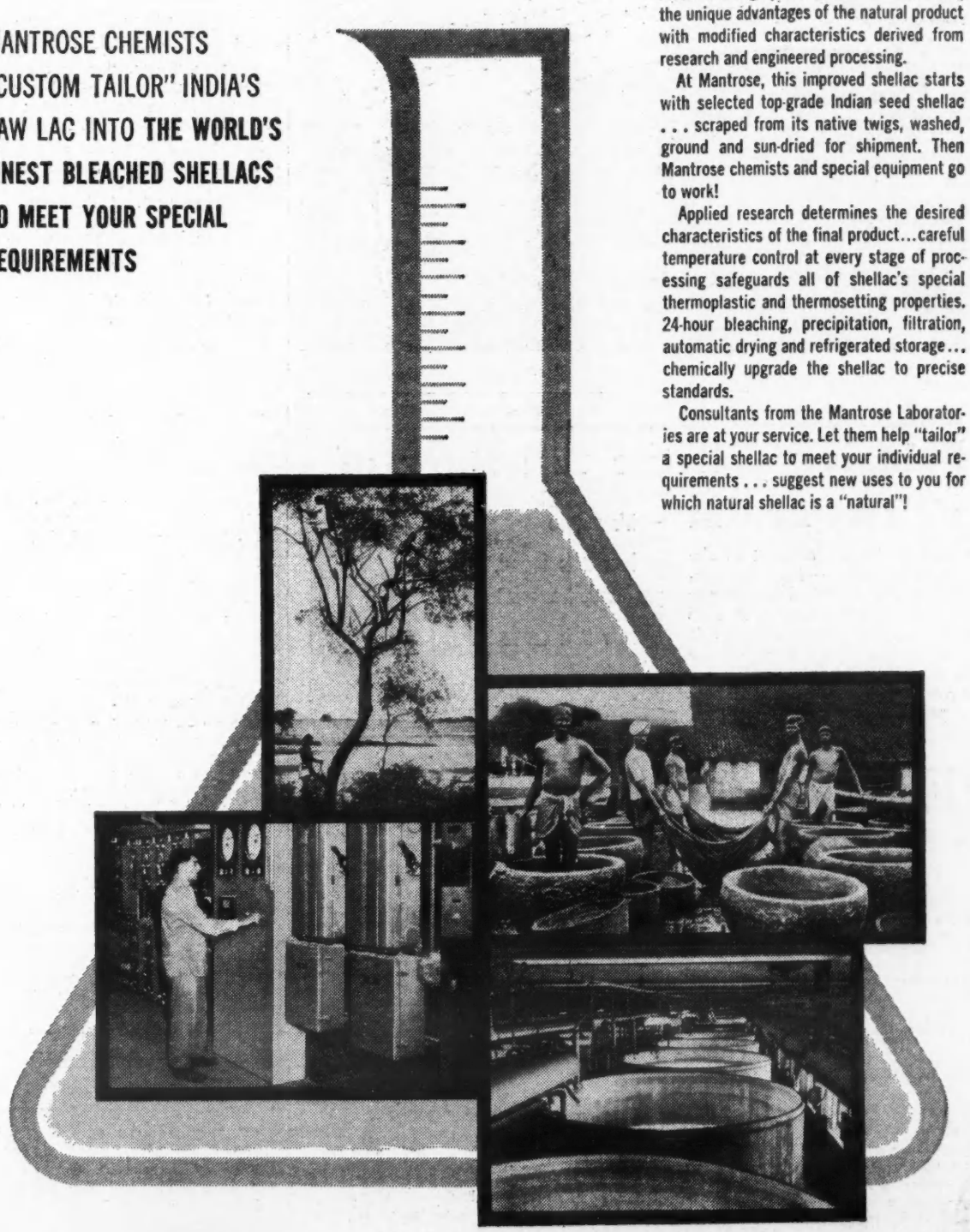

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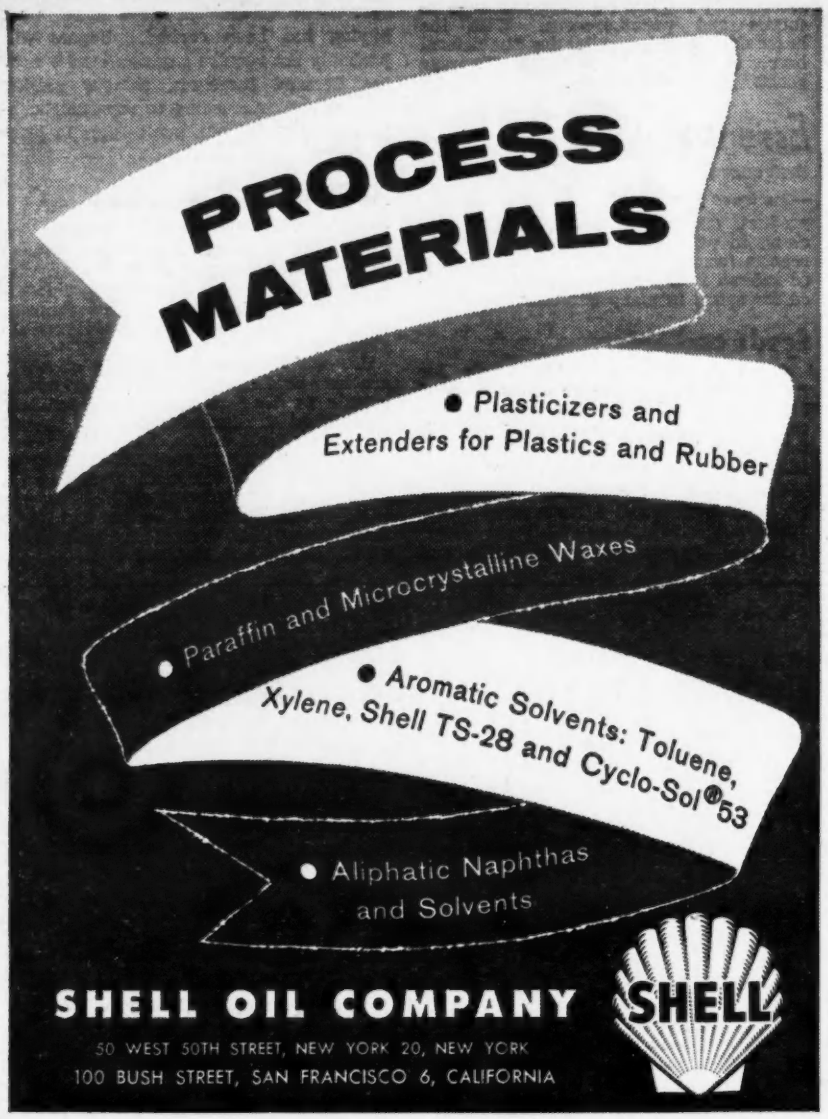
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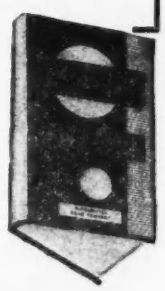

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Petroleum Derivatives

The market appeared to loosen up somewhat last week. Dealers attribute the development to broadening sales in seasonal areas, and also a certain amount of stockpiling by dealers preparing for a Pittsburgh supply cut-off in the eventuality of a strike. On the whole producers anticipate no extensive growth in strength this next quarter. As far as some are concerned, if the market holds its own, it'll be doing well. Waxes, of course, are in the midst of seasonal demand. Likewise paint manufacturers, for construction industry sales are doing well at present. Industrial sales, in the light of Detroit's lethargy, are not doing quite as well.

The daily average production of liquefied gases at refineries in February was tallied by the Bureau of Mines at 8 million gallons. The demand for propane and butane for fuel and chemical uses in February, the bureau notes, was 24 million gallons or 5 percent less than a year ago.

Stocks of liquefied gases totaled 468 million gallons, 93 million gallons above a year ago. Underground stocks, it was added, totaled 276 million gallons on February 9, an increase of 52 million gallons from a year ago.

Production of crude petroleum in the US in February averaged 7,194,000 barbels per day, a decrease of 29,000 barrels per day from January's average, according to the Bureau of Mines. The decline in Texas, it was pointed out, accounted for most of this decrease. Other major producing states recorded only moderate changes in production.

Indicated demand for domestic crude oil, the bureau said, decreased 83,000 barrels per day to a daily average of 7,217,000 barrels. Total crude stocks, domestic and foreign, were 260,040,000 barrels on February 28, compared with 258,108,000 barrels at the end of January.

Well completions, including service wells and dry holes, totaled 3,490 compared with 4,654 in the previous month and 3,451 in February, 1958.

Price Trends

Advanced
None

Reduced
None

Comparative Price Indexes
(100—1949 average)

Last week	Prev. week	Last month	May 10, 1958
104.42	104.42	104.42	105.71

For Current Prices see page 9

Solvents and Diluents

Benzene—The market appears to have settled down to the waiting period that will preface the Pittsburgh labor-management squabble. Most sources seem to be in agreement that a strike will take place. In this eventuality, with the inevitable mark that will be left on the supply situation, petroleum men feel that some sort of juxtaposition between demand and supply may be reached. Aside from this possible development, the market appears little changed from previous weeks. Production continues unabated, with the promise of another major producer going on stream soon, looming on the benzene horizon. Foreign material continues to trickle in. Prices are still reflecting shading in some quarters.

Toluene — Stiffening government requirements for aviation gasoline have made themselves felt on the toluene front, though no drastic movement has been noted in the market place. The best that may be hoped for, one producer suggests, is that the market may steady itself a good bit on the broadened federal demand base. However, this remains to be seen, though producers say that this summer should show just how the market will shape up.

Partial Aromatics—Seasonal sales to construction paint suppliers are giving this material a boost, though with Detroit continuing to drag its feet, there is little likelihood that any sales records will be made. Though the labor crisis has been met and passed over by the automobile manufacturers, their own sales have been lagging somewhat behind the strides that have been made in other areas of the recovering American economy. Though nobody has specifically pinpointed the difficulty, no one seems at a loss to point out just how this has affected the aromatics and other materials plagued by the slow sales situation. The consensus is that time will heal all economic wounds. However, a number of petroleum men come from Missouri, and the way they tell it, there is a choice phrase down that way that covers the derivatives makers attitude toward Detroit.

Crude Oil Stocks

Stocks of domestic and foreign crude petroleum at the close of the week ended April 25 totaled 252,038,000 barrels, according to data reported by the Bureau of Mines. Compared with the total of 251,003,000 barrels the preceding week, this represents an increase of 1,035,000 barrels comprising an increase of 759,000 barrels in stocks of domestic crude and an increase of 276,000 barrels in stock of foreign crude.

LPG's

Butanes — February production of this material amounted to 160,609,000 gallons at plants while refinery output amounted to some 45,234,000 gallons, according to the current report of the Bureau of Mines.

Stocks at plants, terminals and underground, the report says, were 85,697,000 gallons on February 28 while stored material at the previous tally on January 31 came to 81,342,000 gallons.

Deliveries from plants and terminals for use in gasoline amounted to 78,368,000 gallons, while demand for other uses came to 117,114,000 gallons.

Propane—Production of this material at plants in February amounted to some 305,946,000 gallons, as compared with refinery production of 132,636,000 gallons, according to the Bureau of Mines monthly report.

Stocks at plants, terminals and underground on February 28 came to 217,262,000 gallons, as compared to a January 31 figure of 277,303,000 gallons, it was added.

Deliveries from plants and terminals for use in gasoline accounted for a mere 3,234,000 gallons while other uses consumed some 497,909,000 gallons.

Miscellaneous

Crude Oil—Current reports of the industry for the week ended April 24 indicate a decrease in crude-oil production and a decrease in crude runs. According to the American Petroleum Institute, the daily average output of crude (including lease condensate) was 7,132,000 barrels, a decrease of 1,000 barrels from the preceding week. Daily average crude runs to stills of 7,705,000 barrels were 151,000 barrels below the preceding week, and 721,000 barrels above the week ended April 25.

Runs of foreign crude amounted to 662,000 barrels daily, compared with 769,000 barrels in the preceding week.

For the four-week period ending April 24, crude oil production averaged 7,130,000 barrels daily, and crude runs to stills averaged 7,963,000 barrels daily with runs of foreign crude averaging 831,000 barrels daily.

Stocks of refined products at the end of February, according to the Bureau of Mines monthly report, amounted to 474,071,000 barrels, a reduction of 4,203,000 barrels from the revised January level of 478,274,000 barrels.

Total demand for all oils in February, the report pointed out, came to 1,539,000 barrels per day, including exports of 233,000 barrels per day and a domestic demand of 10,306,000 barrels per day. Compared with February, 1958, this represents a decrease of 2,000 barrels per day in total demand and a 44,000 barrels per day increase in domestic demand.

LIQUIDATION

CENTRIFUGES — FILTERS — EVAPORATORS — CRYSTALLIZERS

1—Bird 32" x 50" solid bowl continuous Centrifuge, 316 S.S.

4—Sharples C20 Super-D-Hydrators, 316 S.S.

2—Sharples PN14 Super-D-Canters, 316 S.S.

1—AT&M 26" suspended Centrifuge, perforated basket, 316 S.S.

2—Oliver 8' x 8' Precoat rubber covered Rotary Vacuum Filters.

4—Sperry 36" rubber covered Plate & Frame Filters, 30 chambers.

4—Sperry 36" cast iron Plate & Frame Filters, 30 chambers.

2—Sperry 42" aluminum Recessed Filters, 36 chambers.

4—Shriver 36" wood Plate & Frame Filters, 44 chambers.

5—Struthers-Wells 8' dia. x 24' high rubber lined Vacuum. Crystallizers.

PULVERIZERS AND MILLS

2—Abbe 5' x 16' brick lined Mills.

3—30" dia. Stainless Steel Micronizers complete with Hoppers, Conveyors, etc.

KILNS AND DRYERS

1—Traylor 11' x 155' Rotary Kiln, 7/8" shell welded, 2 tires.

1—Vulcan 8' x 50' Rotary Kiln, 5/8" shell welded, 2 tires.

2—Rennenberg 6' x 60' Rotary Kilns, 5/8" shell riveted.

1—Proctor & Schwartz 8' wide x 60' long Conveyor Dryer, Stainless Steel Belt.

RUBBER LINED TANKS

4—3400 gal. 8' x 8' with Nettco Turbo Agitators, 15 HP motors.

1—4000 gal. 10' x 7'6" with Nettco Turbo Agitator, 10 HP motor.

1—4500 gal. 9' x 9' with Nettco Turbo Agitator, 3 HP motor.

1—5000 gal. 9' x 10' with Nettco Turbo Agitator, 15 HP motor.

5—8500 gal. Vertical Storage, 8'6" x 16' x 8' cone.

1—13,000 gal. Horizontal Storage 8' x 35'.

STEEL TANKS

4—2000 gal. 7' x 7' with Nettco Turbo Agitators, 10 HP motors.

1—3000 gal. 8' x 8' with Patterson Turbo Agitator, 10 HP motor.

1—5200 gal. 10' x 9' with Patterson Turbo Agitator, 10 HP motor.

15—Storage Tanks: 3800; 6000; 9000; 10,000; 15,000; 47,000 gals.

MISCELLANEOUS

11—Steel Buildings 20' to 80' trusses.

2—Shepard Niles 20 ton Overhead Cranes.

7—Dorr Thickeners; and 16' dia. with Tanks.

15—Nettco WT37, WT27, Agitator Drives, 10 & 15 HP.

1—Bemis 50# Bag Packer with Sewing Machine, Conveyor and Flattener.

125—LaBour, Durco, Worthite, Duriron and Stainless Steel Centrifugal Pumps 2" to 6" with motors.

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8—Vulcan 8' x 125' Rotary Kilns.

13—Rotary Dryers: 8' x 87', 7' x 80', 7' x 55', 6' x 60', 6' x 50', 5'6" x 50', 5'6" x 50', 5' x 30', 4' x 40', 4' x 30', 4' x 20', 34" x 30'.

3—Louisville 8' x 50' S.S. Rotary Dryers.

1—Louisville 4'6" x 40' Aluminum Rotary Steam Tube Dryer.

2—Link Belt 6'4" x 24' S.S. Roto Louvre Dryers.

1—Wyssmont 304 S.S. Turbo Dryer, 6'2" x 10'4" high, 24 shelves.

1—Baker Perkins 5'6" x 6' Rotary Vacuum Dryer or Mixer.

5—Baker Perkins 15 JIM2 100 gal. Mixers, Unused.

2—Raymond #5057 5 Roll High Side Mills.

5—Raymond 2 Roll Bowl Mills.

1—Penn. Non-Clog Swing Hammermill 5060, Unused.

5—Raymond and Gayco Double Whizzer Air Separators: 18', 14', 8', 30".

2—Buflovak Monel & S.S. Evaporators: 550, 250 sq. ft.

8—Struthers Wells 316 S.S. jacketed, agitated Reactors: 1000, 2000, 3000 gals.

3—Swenson Walker Crystallizers 30' long.

1—Dialyzers 304 S.S., 120 leaves.

1—Buflovak 42" x 120" Double Drum Dryers.

3—Tyler Hummer 4' x 10' type 38 Vibrating Screens.

1—Oliver 100 sq. ft. Vertical Pressure Filter, 304 S.S.

2—5000 gal. Steel jacketed, agitated Kettles.

MISCELLANEOUS

1—Patterson 5' x 6' Steel Jacketed Ball Mill.

1—HPM 88 ton horizontal Steeping Press.

1—Ross 6" x 14" Three Roll Mill.

3—Swenson Walker Cont. Crystallizers 24" x 30' sections.

3—25 ton Freon Refrigeration Units.

4—Rotex Sifters; 40" x 84"; 60" x 84".

3—Robinson Gyratory Sifters 30" x 104" Triple Deck.

8—Stokes: DD2, DDS-2, T, "R", "F" Tablet Presses.

10—Nash Vac. Pumps: H6, L5, L3, #2, MD572.

25—Chlorimet, Durimet & Duriron Cent. Pumps, 1-1/2" to 6".

REACTORS — EVAPS — CONDS — TANKS

1—1500 gal. Pfaudler glass lined jktd. agtd. Reactor.

1—500 gal. Walters 304 S.S. jktd. agtd. Reactor.

1—1400 gal. Blaw-Knox steel jktd. agtd. Reactor.

1—3500 gal. 304 S.S. jktd. agtd. Tank 9' x 7'.

1—7500 gal. 316 S.S. Vert. Storage Tank 7' x 25', 50 psi.

1—20,000 gal. 347 S.S. Vert. Storage Tank, 12' x 23'.

1—750 gal. nickel clad Mixing Tank, 125# internal with nickel coils.

1—3000 gal. Aluminum Vertical Tank 6' x 18'.

1—4000 gal. Haveg Vertical Tank 8' x 12'.

1—12,000 gal. horiz. steel Tank 7'6" x 36', 200 psi.

8—Stainless Heat Exchangers: 1220, 942, 536, 396, 315, 250, 157 sq. ft.

1—24" dia. x 35', 304 S.S. Bubble Cap Column.

1—30" dia. x 20', 304 S.S. Bubble Cap Column.

CENTRIFUGES

1—Bird 18" x 28", 316 S.S. Solid Bowl, Cont.

1—Bird 18" x 28", steel, Solid Bowl, NEW.

2—Sharples PY14, PN14, Super-D-Canters, 316 S.S.

1—Sharples H2 Nozzlejector, 15 HP, 304 S.S.

1—Bird 40" suspended, 347 S.S., perf. basket.

1—Bird 40" suspended, rubber covered, perf. basket.

1—Tolhurst 30", 304 S.S. underdriven, perf. basket.

2—Sharples #16, 304 S.S., 3 HP motor.

FILTERS

3—Buflovak Vac. shelf, 20—60" x 80" shelves.

1—Oliver 5'3" x 8' Steel Rot. Vac. vapor-tite housing.

1—Sparkler 33S28 Filter 150 sq. ft., 304 S.S.

1—Niagara 36H110 horiz. Filter 110 sq. ft. 304 S.S.

1—Sparkler 33-S-17 steel Filter 92 sq. ft.

1—#12 Sweetland, 48 leaves, 3" centers, 640 sq. ft.

2—#10 Sweetland, 27 leaves, 4" centers, 250 sq. ft.

DRYERS

1—Devine Vac. Shelf, 19—59" x 78" shelves.

1—Devine Vac. Shelf. 10—40" x 43" shelves.

2—Overton 42" x 120" Atmospheric Double Drum.

2—Devine 5' x 12', 4' x 9' Atmospheric Single Drum.

1—Buflovak 3' x 20' Rotary Vacuum, 316 S.S. Unused.

2—Louisville Rotary Steam Tube, 6' x 25', 6' x 50'.

1—Rotary Kiln, 9' x 130'.

1—Traylor 30" x 18' S.S. Rotary Dryer.

MIXERS

1—Baker Perkins #16TRM 150 gal. jktd. sigma blades, Vacuum, 50 HP.

5—Day "Cincinnatus" double arm, 250 & 100 gal.

3—1500# Powder Mixers, 7-1/2 HP XP motors.

3—Steel jktd. Powder Mixers; 225, 350 cu. ft.

Partial List of Values — Send for News Flash!

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BRILL EQUIPMENT COMPANY
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GIGANTIC LIQUIDATION

TYPE 316 STAINLESS STEEL EQUIPMENT

CHEMICAL PLANT
SOUTHEAST TEXAS

SPECIAL ITEMS

3—Sharples C-20 Super-D-Hydrators, T316 SS, 20 HP.
2—Bird-Young 4' dia. x 3' face rotary vacuum filters, 40 sq. ft., T316 SS.
3—18,000 gal. aluminum cone bottom tanks, 12' dia. x 31' OAH.
4—1,000 gal. crystallizers, T316 SS, 5' dia. x 7' high, cone bottom, dished top.
7—500 gal. crystallizers, T316 SS, 3'6" dia. x 7' high, cone bottom, dished top.
1—Alco 60 sq. ft. vertical pressure leaf filter, T316 SS.
3—Worthington 160 ton steam-jet refrigeration units.

TYPE 316 STAINLESS STEEL KETTLES

4—3,500 gal. kettles, Struthers-Wells, 7' dia. x 12' high, T316 SS, 11/32" shell, dished heads, 11 turns, SS coil, 10# jacket, two-speed agitator, 40/20 HP - 1750/500 RPM.
1—2,500 gal., 6' dia. x 12' high, T316 SS, with pipe coil.
3—1,000 gal., 5'6" dia. x 6' high, T316 SS, int. coils, turbine agitators.

TYPE 316 STAINLESS STEEL TANKS

1—17,000 gal., 9' dia. x 36' long, T316 SS, ¼" shell, ⅜" heads w/coil.
2—7,500 gal., 10' dia. x 13' high, T316 SS, ¼" shell.
2—5,000 gal., 11' dia. x 7' high, T316 SS, 7/16" shell, ½" heads.
12—2,300 gal., 7' dia. x 8' high, T316 SS, ¼" shell, coils (some with agitators).
2—2,000 gal., 6'6" O.D. x 8' long, ¼" shell.
5—1,000 gal., 5'6" dia. x 6' high, T316 SS, w/coils (some with turbine agitators).
4—1,000 gal., 5' dia. x 7' high, dished top, 42" deep conical bottom crystallizer.
1—350 gal., 4' dia. x 9' high with coil and 1½ HP Lightnin' agitator.
7—500 gal., 3'6" dia. x 7' high, ¼", dished top, 4' deep conical bottom crystallizer.
55—Tanks and Pots from 10 gal. to 350 gal. sizes, vertical and horizontal.

CONDENSERS — HEAT EXCHANGERS — CALANDRIAS — COOLERS

1—1,450 sq. ft. condenser, stainless steel tubes, tube sheets, heads, and baffles, steel.
1—1,200 sq. ft. condenser, stainless steel tube, steel shell.
11—Condensers, 750 & 800 sq. ft. stainless steel, vertical, T316 SS tubes and heads.
9—Condensers, 356, 400, 410, 550 sq. ft., T316 SS.
6—Calandrias, 140, 145, 150, 157, 250, 277 sq. ft., T316 SS.
11—Exchangers, 64, 70, 75, 80, 100 sq. ft., T316 SS.
12—Exchangers, 20, 30, 47, 50, 52, 54 sq. ft., T316 SS.

COLUMNS — STAINLESS STEEL

1—108" dia. Vulcan scrubber, 10 trays on 12" centers, 252 bubble caps per tray.
1—96" dia. x 13' high scrubber, 10 stainless steel trays on 12" Centers, 276 caps.
2—96" dia. bubble cap columns, 30 trays, 12" spacing, 272 caps per tray, ⅛" shell.
2—60" dia. x 13' high, Vulcan scrubbers, 10 trays, 100 caps tray, 12" centers.
1—42" dia. column, 30 trays, 44' high, 22 bubble caps per tray.
1—48" dia. column, 25 trays, 66 bubble caps per tray.
3—30" dia. packed columns, 25' high.
4—24" dia. bubble cap columns, 12 trays, T316 SS, 18" spacing.
2—20" dia. stainless steel columns, 30' & 25' high, T316 SS.

COLUMNS — COPPER

1—72" dia. bubble cap copper column, 46'10" high, 40—trays.
1—48" dia. bubble cap copper column, 31'3½" high, 25—trays.
1—48" dia. bubble cap copper column, 45'7⅛" high, 40—trays.
2—42" dia. Vulcan stills, 66" high.
1—24" dia. column, 25'8½" long, 20—trays.

STAINLESS STEEL PUMPS

8—Ingersoll-Rand #5 HC, 6" x 5", centrifugal, 20 HP.
2—Ingersoll-Rand #3 MC, 4" x 3", centrifugal.
1—Ingersoll-Rand #2 MC, centrifugal.
1—Ingersoll-Rand #1½ HC, 3" x 2", centrifugal, 10 HP.
2—Durimet 20, centrifugal, 10 HP.
2—Stainless steel pumps, 2½ x 2", 5 HP.
2—Stainless steel pumps, 2" x 2", 2 HP.
17—Stainless steel pumps, Ingersoll-Rand #1½ MCS, 2" x 1½".
1—Stainless steel pump, #10 DHL, 2" x 1", 2 HP.
1—Stainless steel pump, 15 GPM @ 45' head, 1 HP.
1—Durimet 20 #2A centrifugal pump, stainless steel.

MISCELLANEOUS EQUIPMENT

2—St. St. bucket elevators, 62' and 45' high.
3—Fuller 16" T316 SS rotary feeders.
4—Stainless steel screw conveyors and chutes.
1—2,000 gal. aluminum tank, 6' dia. x 10' high, coils.
1—1,000 gal. copper tank, 7'6" dia. x 3' high, ⅛".
25—Stainless steel steam jet evactors and ejectors.
18—Separators, T316 SS, 22" x 8' overall depth, cone type.
1—Croll-Reynolds #21 jet vacuum air pump, capacity 50# per hour.
1—Pneumatic Conveyor System, approx. 1150 ft. 10" dia. aluminum pipe.
300—Valves, T316 SS up to 10".
Also Pipes, Steel Pumps, Steel Tanks, Agitators, etc.

IN STOCK AT PHILADELPHIA AND OTHER LOCATIONS

ROTARY DRYERS — KILNS

2—7'6" dia. x 100' long kiln, ½" shell, firing hood, 30 HP M-R.
1—11' dia. x 155' long Traylor kiln, ¾" welded shell.
4—8'8" x 70' dryers, Hardinge class #XA-18, ½" dbl. shell.
1—7' x 50' dryer, Allis-Chalmers, ½" dbl. shell, 50 HP M-R.
1—6' x 50' Louisville steam-tube dryer, 15 HP M-R.
6—Dryers: 5'6" x 50', 4'9" x 30', 4'6" x 40', 4'6" x 32', 4' x 24', steel.
2—Stainless steel dryers: 4' x 12'6", 3'6" x 12'.
1—3' x 15' rotary dryer, Everdur metal construction.
1—Link-Belt Mono-tube dryer, 2' x 10', model #24-10.
2—4' dia. Spray Dryers, Western Precip., T304 SS, pilot size, elec.

FILTERS — CENTRIFUGALS

2—OLIVER 5'3" dia. x 3' f., rot. vac. filters, pressure precoat, T316SS, ASME.
1—OLIVER 5'3" dia. x 8' f. rotary vacuum filter, UNUSED.
1—Niagara #510-28 vert. pressure leaf filter, T316 SS, 500 sq. ft.
1—Niagara #36H-110 horiz. leaf filter, T304 SS, 100 sq. ft.
1—Sparkler #33-S-28 filter, T304 SS, 150 sq. ft.
6—Sharples Super-D-Hydrators, C-20, T316 SS.
4—Sharples Super-D-Canters, #PN-14, PY-14, T316 SS.
8—Sharples #16 Super Centrifugals, T304 SS. (sep. & clarif.).
2—Sharples #18-V Super, vapor-tite, tinned-steel, 3 HP.
5—Bird horiz. contin. centrifugals: 40" x 60", 32" x 50", 18" x 28" S.S.
3—Bird type CH, 24" x 24", Monel slotted screen, continuous.
2—DeLaval hermetic clarifiers, #BUH-3930, 1951, SS.
1—A.T.&M. 48" susp., T304 SS perf. basket, vapor-tite, 20 HP.
6—A.T.&M. 40" susp., T314 SS, solid basket, 40 HP, 1952.
1—Bird 40" susp., steel solid basket, 40 HP, 1800/900 RPM.
1—Fletcher 30" susp., T304 SS perf. basket, 7½ HP, 1200/600 RPM.
1—Fletcher 30" underdriven, T304 SS perf. basket, 5 HP.
1—Tolhurst 26" centerslung, T316 SS perf. basket, 2 HP XP.
1—Tolhurst 26" susp., steel perf. basket, 5 HP, 1954, 1100/550 RPM.
1—A.T.&M. 20" susp., T304 SS solid basket.

TANKS

12—4500 gal. Nickel-Clad, 8' dia. x 12' high, vert., 125# WP.
4—3500 gal. Nickel-Clad, 6'6" dia. x 12' high, vert., 190# TP.
1—10,500 gal. T304 SS, 8' x 28'3", horiz., UNUSED.
2—5700 gal. T304 SS, 6'4½" x 24', horiz., UNUSED.
1—3700 gal. T304 SS, 6' x 17'6", Vacuum, internal coils.
1—3400 gal. T304 SS, 6'6" x 16', horiz., dished heads.
2—3000 gal. T304 SS, 6' x 14', Vacuum, internal coils.
1—3000 gal. Aluminum vertical, dished bottom.
1—2350 gal. T304 SS, 5' x 16', Vacuum, internal coils.
1—2000 gal. T316 SS hopper, 6'9" x 6'9" x 3'8", cone bottom.
8—1750 gal. T304 SS hoppers, 4'5" x 7'4" x 9'2", 235 cu. ft.
1—1400 gal. T316 SS, 5' x 11', Vacuum, ASME 175 .

EVAPORATORS — VACUUM PANS — STILLS — EXCHANGERS

2—Buflovak forced-circulation evaporators, 250, 20 sq. ft., T304 SS, 1953.
2—Nickel-clad single effect, 400, 250 sq. ft., vert. long-tube.
1—Buflovak dbl. effect, T304 SS, 588 sq. ft., vert. long-tube.
1—Struthers-Wells calandria, T347 SS, 625 sq. ft., Vacuum.
1—Bartlett-Snow evaporating kettle, 6' dia. st. st., agit.
5—Sanitary vacuum pans, T304 SS, w/coils: 6', 5', 4' dia.
1—Exchanger, 2000 sq. ft., T316 SS, 15# WP tubes, 50# WP shell.
1—Exchanger, 800 sq. ft., T316 SS, 250 WP shell, Vac. tubes.
2—Exchangers, 400 sq. ft., T304 SS tubes, T347 SS T. sheets, heads.
15—Yeast coolers (heat exchangers), 185 sq. ft., T304 SS, U-tube.
1—Pfaudler 47 sq. ft. glass-lined condenser, jacketed.
1—1400 gal. vacuum still, T316 SS, ASME 175#, 5' dia. x 11' high.

REACTORS — FERMENTERS — KETTLES

2—3000 gal. Resin Kettles, T304 SS, 7' x 10', 7½ HP XP agit.
1—1400 gal. Reactor, T316 SS, ASME 175#, 20 HP XP agit.
3—750 gal. Fermenters, T304 SS, ASME 30# int. 30# jkt., 10 HP, XP turbine agit.
6—465 gal. reactors, T304 ELC-SS 150# int. 160# jktd.
1—250 gal. reactor, SS, 40# jkt., 10 HP duplex - turbo agit.
2—125 gal. fermenters, T316 SS, ASME 30#, jkt. & int.
1—100 gal. reactor, T304 SS, ASME Vac. int., 75# jkt., UNUSED.
2—Pfaudler 750 gal. G/L reactors, jkt. & agit., impeller agit.
1—Pfaudler 600 gal. G/L reactor, jkt., agit.
5—Pfaudler 500 gal. G/L reactors, 25# int., 75# jkt.
1—Pfaudler 150 gal. G/L reactor, ASME, jkt. & agit.
1—Pfaudler 100 gal. G/L reactor, ASME Vac. int., 75# jkt.
1—Pfaudler 30 gal. G/L reactor, 25# int., 75# jkt. agit.
2—1800 gal. Steel Kettles, 180# jkt., paddle agit., 7" valve.
1—1500 gal. Steel Reactor, ASME 600# int., 150# jkt., 25 HP XP agit.
2—1000 gal. Steel Dissolvers, 20 HP XP agit., jkt.
1—1000 gal. Cast Iron Dopp Kettle, 25 HP agit., jkt., ASME.

PRESSES

5—Komarek-Greaves Briquetting Presses, 25 tons/hr., 75 HP.
7—Stokes tablet presses, Models R, T, DDS-2, RD-4.
7—Dewatering Presses: Davenport #1A, 3A; Louisville 36", 8-roll.
1—Steeping press, HPM 63 ton, 20 x 18, 101" daylight. UNUSED.

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EQUIPMENT
for CHEMICAL AND ALLIED INDUSTRIES

12—Robinson SS horizontal 255 cu. ft. blenders.

1—Steel & Alloy Tank Co. type 347 SS, 200 gal. jacketed autoclave, 250# internal and jacket pressures.

1—Steel & Alloy Tank Co. 125 gal. type 347 SS, jacketed autoclave, 250# internal and jacket pressures.

4—Steel & Alloy Tank Co. 100 gal. type 347 pressure tanks, 250# pressure.

1—Steel & Alloy Tank Co. 300 gal. type 347 SS pressure tank, 250# pressure.

1—Patterson SS jacketed double arm vacuum sigma blade mixer, 300 gal. complete with motor.

2—Baker Perkins SS double arm sigma blade jacketed mixers, 100 gal.

1—Patterson monel 4 cu. ft. double cone blender.

2—Louisville rotary steam tube dryers, 8' x 45' and 6' x 50'.

1—Traylor kiln 4' x 40'.

1—Louisville rotary dryer, 38" x 40', Type L, indirect.

1—Stokes rotary vacuum dryer, 2' x 6', steel.

10—Day Pony Mixers, 8 gal. and 16 gal.

1—Stokes stainless steel rotary vacuum dryer, 2' x 6'.

3—Stokes rotary vacuum dryers, 3' x 15', steel.

1—Stokes rotary vacuum dryer, 5' x 30'.

3—Robins SS shaker screens 3' x 6'.

2—Selectro SS shaker screens, 2' x 7', 3 deck.

1—Stokes Model DDS2 rotary tablet press.

1—Reitz S.S. Thermascrew, Model TJMK2-12 x 8.

1—Sweetland #3 SS filter, 70 sq. ft.

3—Dorrco rubber covered filters, 6' x 2'.

12—Sweetland #12 filters with SS leaves.

2—Struthers Wells type 316 SS jacketed 3500 gal. reactors, complete with coils, agitators and drives.

8—Alco type 316 SS jacketed reactors, 3000 gal. complete with Turbine agitators and drives, 50 psi jacket.

2—Pfaudler type 316 SS jacketed reactors, 750 gal.

1—Nickel storage tank, 4000 gal. 30 psi.

1—Ames 300 H. P. package steam generator, 150 psi.

1—Feinc SS rotary vacuum string filter, 3' x 3'.

10—Davis Engineering type 316 SS heat exchangers, 87, 104, 121, 139 and 170 sq. ft. (NEW).

1—Merco SS centrifuge, Model B-9.

4—Tolhurst 40" and 48" rubber covered perforated baskets centrifuges complete with motors.

2—Swenson type 316 SS vacuum crystallizers, 3'6" x 12' and 2'6" x 12', complete.

1—Vulcan SS 4' dia. x 28 trays bubble cap column.

2—Badger SS bubble cap columns, 42" x 12 trays, and 36" x 8 trays.

1—Link Belt roto louver dryer, Model 1003-30, complete.

1—Cleaver-Brooks 500 H. P. package steam generator, 150 psi.

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SAVE ON GOOD USED MACHINERY

CENTRIFUGALS—12", 30". 40" & 48".
CENTRIFUGES—Sharples #5 Stainless. Also #4.
DRYERS—Allright Nell 4' x 9' Atmos. Drum Dryer.
Buffalo Vac. Drum Dryer 24" x 20".
Vac. Shelf & Rotary Dryers.
FILLERS—Powder & Liquid. Also Labelers.
FILTERS—Vallez type 49. with 41 Stainless covered leaves.
#2 Sweetland 12 Stainless covered leaves.
Ertel 6" & 10" Disc type.
FILTER PRESSES—6" to 36" Iron & Wood.
KETTLES—Stainless Jack. 80, 60, 50 gal.
Dopp 350 gal. Cast Iron Jack. Vacuum.
Devine Impreg. Units 30" & 36" dia.
Steel, Alum. & Copper 5 to 2,000 gals.
MILLS—Raymond #00 Pulverizer 30 HP complete. Also #0000.
Mikro Pulverizer #4, 2S1, 2TH, 1SH,
Hammer Mills & Pulverizers 3 to 50 HP.
Williams #BB, #3 & #2XX Hammer Mills.
Ball & Jewell #2 Rotary Cutters.
Spr. Wald, Stainless Spike Crusher.
Pebble, Jar & Ball Mills. Lab. to 6' x 8'.
Steel 3 Roll, 9" x 32", 12" x 30" & 16" x 40"
Lehmann 4 Roll W. C. 12" x 36" Steel
MIXERS—Baker Perkins 100 gal. Jack.
Day Imperial 30, 75 & 150 gal.
Change Can Mixers 8, 15, 40, 150 gal.
Day Jumbo 700 gal. horiz. Mixer.
Blystone 3000# horiz. spiral Mixer.
Sturtev. 1 ton Drum Blender 10 HP.
Dry Spiral Mixers 30 to 3000#.
Lancaster 6' dia. 25 HP & #1, 3 HP.
PUMPS—Stokes, Buffalo etc. Vac. 10 to 500 CFM.
Gould 75 HP Centrifugal 250 PSI.
SIFTERS—Day, Robinson etc.
SOAP MACHINERY—Toilet, Laundry, etc.
TABLET MACHINES—Stokes RD3 Rotary.
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Partial Listings — Write for Bulletins

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STerling 8-1944

EQUIPONOMICS

HOMOGENIZER — Manton Gaulin, S.S Model 500E, 500 GPH, 5000 PSI.
OLIVER VACUUM FILTERS—S.S. 316, 3' x 6' Complete. (1954).
EVAPORATORS—Single effect—All Monel 290 sq. ft. 150 sq. ft. Complete.
CENTRIFUGES—Tolhurst 26" Monel; 40" S.S. Susp; 40" Rubber Covered.
FILTER PRESSES—Shriver 36" x 36"—34-1½" Rubber Covered Frames.
PFAUDLER—G/L Kettles 300, 500 gal.
HARDINGE Conical Ball Mill, 4½' x 16".
SIFTERS—Rotex 2 deck, 40" x 60"; 5 deck, 40" x 120".
COLUMN—S.S. 26" dia., 7 bubble cap trays, 12" spacing.
MIKRO ATOMIZER—#5, S.S. complete.

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1—400 gallon stainless steel jacketed reactor.
1—80 gallon stainless steel autoclaves.
1—Sharples model TY-14 super-d-canter, stainless.
1—Oliver 1' x 1' type 316 stainless rotary filter.
1—Patterson Kelly 40 cu ft stainless steel twin shell blender.
1—Mikro atomizer #6, stainless.
5—Rotex sifters, 20" x 48", 40" x 84", 40" x 120".
1—Devine 17 shelf dryer 40" x 43".
2—Stokes rotary vacuum dryers, 18" x 42", 30" x 8'.
1—Readco 25 gallon stainless jacketed vacuum mixer.

CHEMICAL & PROCESS MACHINERY CORP.
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ECH SPECIALS

Buflovak 36" SS one effect Evap., 100 sq. ft.
Gruendler "BB" Whirlbeater Hammer Mill.
Pfaudler 1,500 gal. Glass Tank; closed top.
Nash Hytor Vac. Pump #6, 40 HP motor.
Day 40 gallon Pony Mixer with motor.
Devine Vac. Shelf Dryer; 59" x 78", dbl. door.
BP Jktd. Mixer 100 gal. working cored arms.
Gen. American 42" x 120" Twin Drum Dryer.
Patterson ¾ gal. SS Jktd. Lab Mixer, 2 HP.
2—Mikro's—Bantam & 1SL with 5 HP motor.

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EXCELLENT CONDITION
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CRUSHERS—Jaw—2¼x3 (new), 9x16 Climax, 16x10 Farrel, 24x13 Farrel, Sturtevant 3 HP cone.

MILLS—Hammer—00 Sturtevant 10 HP, AKB Wms. 25 HP, 2W Mikro 30 HP, #2 Gruendler 40 HP, AKBX Wms. 50 HP, 30 NF Wms. 100 HP, #50 Raymond Imp a.s.

SCREENS—12"x72" S/S Ajax, 3x5 single, 3x10 double, 3x10 double (aluminum) Tyler Hummer, 20"x81" triple, 40x84 double Rotex, Jeffrey 30"x72" w/rectifiers.

MIXERS—16 Gal. Pony, 1 c.f., 20 c.f., 30 c.f. cone; 12 c.f., 22 c.f., 26 c.f. Ribbon —52 c.f. Sturtevant Drum—110 gal. double Sigma, Day.

MILLS—Pebble—Lab Jars (new)—30x36, 36x36, 36x42, 36x48, 72x80, porcelain lined —6'x8' Buhrstone—w/drives.

PACKERS—Valve bag—St.Regis 100LS, 105 FV w/scales—Triangle Auger type—Pneumatic Scale Capper.

FEEDERS — Hardinge — "B" Constant Weight, Draver Rotary, Jeffrey Vibrating 2A.

PUMPS—4" Viking 15HP, 4" Blackmer 25HP (unused), 3" Wilfley Acid, 1" thru 8" Centrifugal, Leiman 105CFM Vacuum

DRYERS — Rotary — 24"x22".33"x18',36"x24' 44"x25', 4'x40', 42"x14' S/S, 12'x24'x90" w/12 trucks, steam—66"x25' Louisville.

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LAWLER PLACE METUCHEN, N. J.
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Horizontal Spiral Mixers 1000 to 10,000# cap.
Tolhurst 32" & 40" Sus. Style Centrifugals.
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Gruendler #1 Super Master Pulverizer w/15 HP Motor & Cyclone.
Rotocione Size 16, Type W—15 HP.
Am. Horiz. Sterilizer 42" x 48" x 96" — Dble. Dr.
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2—OLIVER PRESS, PRECOAT FILTERS 5'3" x 3'—Type 316 S.S.
7—RIBBON BLENDERS, 2500 gallons, Roller Bearings Stuffing Boxes.
6—MICRO PULVERIZERS, #2S1, #3D1.
8—SIFTERS—READCO, 36" x 78".
5—NICKEL KETTLES, 500 gallons, Agitated, Jacketed.
AT&M—24" S.S. Solid Basket Underdriven.

MACHINECRAFT CORPORATION
800 WILSON AVE., NEWARK 5, N.J.
MI 2-7634

Business Wants and Offers

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BUSINESS OPPORTUNITY

Chemical Business For Sale producing textile chemical specialties, detergents, metal cleaners, solvents and water-treatments. Area: Buildings 40,000 square feet; yard space + 1 acre. Equipment: Steam jacketed kettles; dry and wet mixers; packaging lines for powders and liquids. Located in the Metropolitan (NYC) district and is operating at a small fraction of its capacity. This is a good opportunity for a sales-minded chemist seeking to buy a substantial or total interest in a going chemical business with good growth possibilities. The amount of cash required as initial payment is $20,000. OPD 748

EQUIPMENT OFFERED

For Sale: Conveyor Haiss Portable, model 485, size 24" wide x 30 ft. long. Adjustable Tripod at feed & discharge ends. 3 HP motor forward, reverse & stop controls at both ends. A-1 condition, Price $1,500. OPD 749.

Complete 4 pass Pyrex glass condenser with reflux, bantam micro pulverizer, stainless centrifuge, 7" aluminum filter press, Sigmamotor variable speed pumps, 22 liter flasks with glascol heaters, vacuum pumps, table top buchner funnels, 100 gal steel drums, standard taper and variety of miscellaneous glassware, Hills-McCanna proportionating pump, 30 gal stainless batch cans. William Galler, PO Box 254, Valley Stream, New York phone Locust 1-8225.

For Sale: 40" and 26" Tolhurst suspended perforated steel Centrifuges; (6) 7,500 gal., (6) 4,500 gal. lastiglas lined Tanks; 24" x 36", 42" x 120" ASME Double Drum Dryers; 1,500 gal. Stainless Tank with coils; 750, 1,800 gal. Stainless Tanks; 150 and 120 sq. ft. Stainless Heat Exchangers; 72" dia. single effect Stainless Evaporator. Best Equipment Company, 1737 W. Howard St., Chicago 26, Illinois. AMbassador 2-1452.

EQUIPMENT WANTED

Solvent crystalization equipment to separate minimum of 1,000 pounds per hour 0 to 4 degree centigrade Red Oil from Animal Fatty Acids, advise make, condition, location, time inspection available, price fob cars, shipping weight. OPD 750.

EQUIPMENT WANTED

Photovolt Photoelectric Glossometer, Model 660, 60° Head; Brookfield Viscometer, Model RVF, 4 Speed, seven spindles; International Clinical Centrifuge, for 15 ml and 50 ml tubes; Refractometer Abbe, 1.30 to 1.70 range, compensating disk; Boston Bradley or Baker adjustable film applicator; Sanders Chemical Company, 2205 N. American Street, Phila. 33, Pa.

FACILITIES WANTED

Urgently need to arrange for temporary use of facilities for 10 to 25 gallon organic synthesis. Require reaction kettles with good cooling, vacuum distillation, fractionation, 2,500 psi hydrogenations. Telephone Robert S. Henly, Applied Science Laboratories, Inc., ADams 8-2062, State College, Penna.

MATERIALS OFFERED

Tetrachlorethane (Acetylene Tetrachloride)—Not reclaimed—It is redistilled, restabilized prime commodity. Product equivalent to prime. $0.08/lb. in Galvanised Drums, $0.065/lb. bulk, FOB, Newark, N. J.; 8,000 gallons mixed solvent—20% Butyl Alcohol, 80% Xylol. $0.35/gallon, bulk, FOB, Newark, N. J.; Wilson Refining Co., Inc., 338 Wilson Avenue, Newark 5, N. J., MArket 3-5912.

13,000 lbs. Igepon TE 42 (GAF); 100,000 lb. Triethylene Glycol; 2,000 lbs. Nickel Acetate; 2,000 gal. Ethyl Cellulose Spraying Lacquer; continuous Sodium Benzoate and Benzoic Acid; 800 lbs. Bismuth Oxylchloride; 16,000 lbs. Petro Wax. Industrial By-Products & Surplus Co. 40-40 Lawrence St., Flushing 54, New York. INdependence 1-4100.

Save 50%. Drum cap seals. Tri-Sure & Rieke. 250,000 3/4" & 2". Aroclor 4465. P. V. Alcohol (Borden's Lemol 42-88). Also Para Cresol. Ethylene Glycol Monostearate. Pentachlorphenol. Sodium Toluene Sulphonate. Cobalt Stearate. Manganese Mapthenate 6%. Tantalum Amm. Nitrate. Beeswax. Paranitrophenol. Methyl Cyclohexane. Bunatak 210. Aroclor 1262. Chemical Service Corp., 88 Beaver Street, New York 5, HA 2-6970.

MATERIALS OFFERED

30 Drums Dibutyl Maleate (off-color) 15c per lb.; 2 Drums Carbitol Acetate 20c per lb.; Carbon Tetrachloride 7.5c per lb. in bulk; Competitive Lacquer Thinner (regular basis) 30c per gal in bulk; Chemsol, Incorporated, 74 Dod Street, Elizabeth, New Jersey, Telephone—FLanders 1-2021.

POSITION OFFERED

Opportunity For Plant Superintendent Production Manager with prominent, well-established, aggressive Los Angeles manufacturer of drugs and pharmaceuticals. To qualify, you must be a Registered Pharmacist or equivalent in terms of training or experience, with knowledge of the manufacture of liquid and tablet drugs and pharmaceuticals, plus knowledge of high-speed packaging principles, plus management ability. Production end of this large, modern plant to be completey under jurisdiction of man we seek. Write, in confidence, stating qualifications and salary expectation, to OPD 751.

REAL ESTATE

Restricted For you—not against you. A new unique concept in Industrial Terminals is now being developed within the skylines of Manhattan for companies requiring heavy industrial zoning. Existing buildings available from 1,000 to 50,000 sq. ft. on a lease—purchase, or buildings erected to suit. All utilities plus rail and high press Steam. Louis Schlesinger Company, 901 Broad St., Newark 2, N. J. MArket 2-6500.

REPRESENTATION WANTED

Sell Baltimore to Boston—The Gold Belt. We have a record of successful sales & market development; prime and by-product chemicals & solvents to Plastics, Adhesives, Paint & Lacquer, Dyestuffs & CPI. We originated and introduced several bulk products & sold entire output. Will act as principals or exclusive sales agents. Established 1950. What do you have to sell? Chemical Affiliates, Inc., 274 Madison Ave., New York, 16, N. Y. MU-3-2593.

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Stokes 3 DDS2, 2 DS3.
Baker Perkins, 150 and 100 gal. S.S. 2 arm.
40 HP & 50 HP jacketed, vacuum, hydr. tilt.
Blaw-Knox 2 gal. S.S. Autoclave 5,000 lb.
Vulcanizer 60" x 9' 125 lbs.
Sweetland #2 all stainless.
Stainless steel Ball Mill.
Aluminum Condenser 350 square feet.
4-24" Filter Press S.S. Fittings Wood Fr.
1-24" Filter Press open delivery.
2 Proctor & Schwartz finned Drum Driers.
Continuous Stripping Column 2 x 13.
Alum Evaporator Calandria type 1,300 sq. ft.
Banbury Mixer Midget.
Ribbon Blenders. Hydraulic Pumps.

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800 Wilson Ave. (East of Doremus)
Newark 5, N.J. MI 2-7634

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77 VARICK STREET NEW YORK 13, N.Y. WO 6-4533

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—and off-grade—
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FINISHED PRODUCTS
BY-PRODUCTS — WASTES — RESIDUES
Chemical Service Corporation
88 BEAVER STREET, NEW YORK 5, N. Y.
HAnover 2-6970

Imports at US Ports

—Continued from page 61

QUINOLIN—8 dms, B L Lemke & Co, Rotterdam
R-SALT—52 dms, Atlantic Chemical Corp, Genoa
RICE STARCH—360 bgs, Oskar Eisman, Trieste
SAGE OIL—2 bbls, Ungerer & Co, Rijeka
SEEDLAC—250 bgs, C H Timm, Calcutta
100 bgs, Wm Zinsser & Co, Calcutta
100 bgs, Capitol Shellac Corp, Calcutta
100 bgs, Gillespie Rogers Pyatt, Calcutta
250 bgs, Wah Chang Corp, Bangkok
250 bgs, Capitol Shellac Corp, Bangkok
200 bgs, H C Smith, Calcutta
SESAME SEED—614 bgs, Chase Manhattan Bank, San Juan del Sur
64 bgs, Chase Manhattan Bank, Corinto
250 bgs, Louis Furth, Corinto
125 bgs, J Bieler, Corinto
SESAME SEED, HULLED—110 bgs, W R Grace & Co, Corinto
100 bgs, Hismoco American Co, Corinto
600 bgs, Neiman Bros, Corinto
500 bgs, Louis Furth, Corinto
550 bgs, R J Spitz, San Juan del Sur
200 bgs, Levy Levis Co, San Juan del Sur
500 bgs, Louis Furth, San Juan del Sur
SHELLAC—100 bgs, Mac Lac Co, Calcutta
SILICON—383 dms, International Selling Corp, Marseille
SODIUM ALGINATE—10 dms, Stein Hall & Co, Glasgow
SODIUM CYANIDE—225 dms, Chemical Manufacturing Co, Liverpool
SODIUM HYDROXYCINNAMATE—33 cks, Havre
SODIUM LAURYL SULFATE—150 cks, Liverpool
SODIUM PERBORATE—309 bgs, Republic Chemical Corp, Hamburg
SODIUM PERBORATE TETRAHYDRATE—1,200 bgs, Chemical Manufacturing Co, Liverpool
SODIUM PHOSPHATE—400 bgs, Rotterdam
300 dms, Rotterdam
SULFAMETHAZINE—20 dms, Copenhagen
SULFUR, CRUDE—10.503 tons, Allied Chemical Corp, Coatzcoalcos
TALC—750 bgs, L A Salomon & Bro, Bordeaux
4,660 bgs, Charles Mathieu, Genoa
TANKAGE—658 bgs, Napier
TETRACHLOROETHANE—1,870 tons, E I Dupont de Nemours & Co, Venice
THALLIUM METAL—3 cs, Lo Curto & Funk, Bremen
THALLIUM SULFATE—3 cs, Lo Curto & Funk, Bremen
TITANIUM DIOXIDE, RUTILE—1,600 bgs, Nylos Trading Co, Genoa
TOLU BALSAM—5 dms, Fritzsche Bros, Cristobal
5 dms, Meer Corp, La Libertad
TONKA BEANS—49 cks, Royal Bank of Canada, Port of Spain
TRICHLOROETHYLENE—1,461 tons, E I Dupont de Nemours & Co, Venice
200 dms, Bedford Chemical Corp, Genoa
TUNG OIL—200 tons, Bunge Corp, Buenos Aires
399 tons, Buenos Aires
TURMERIC—160 bgs, M J Golombeck, Cochin
160 bgs, W L Willner, Cochin
160 bgs, Cochin
UREA FORMALDEHYDE POWDER—2 dms, R B Symons Inc, London
VANILLA BEANS—248 cs, Mombasa
VETIVER OIL—5 dms, Port Au Prince
ZINC CHLORIDE—50 dms, Riches Nelson, Antwerp
ZINC OXIDE—40 bgs, Aceto Chemical Co, Liverpool
400 cs, C B Chrystal Co, Marseille
320 bgs, Liverpool
600 bgs, London

Los Angeles

CASEIN—400 bgs, Borden Co, Buenos Aires
CASSIA—41 bls, Djakarta
COPAL GUM—37 bkts, H W Peabody, Singapore
COPRA—1,000 tons, American Trust Co, Zamboanga
500 tons, American Trust Co, Dipolog
500 tons, American Trust Co, Dumaguete
1,400 tons, American Trust Co, Tacloban
250 tons, Pacific Vegetable Oil Corp, Tacloban
250 bgs, Pacific Vegetable Oil Corp, Cebu
250 tons, American Trust Co, Cebu
300 tons, Cargill Inc, Cebu
500 tons, American Trust Co, Bulan
750 tons, American Trust Co, Suriago
GYPSUM, CRUDE—10,327 tons, Kaiser Gypsum Co, San Marcos
KARAYA GUM—100 bgs, Hathaway Allied Products, Bombay
LOCUST BEAN GUM—100 bgs, Hathaway Allied Products, Antwerp
MOLASSES—15,000 tons, National Molasses Co, Kaohsiung
4,388 tons, S Western Sugar & Molasses Co, Manzanillo
MONTAN WAX—60 bgs, Dura Commodities Corp, Rotterdam
NUTMEG—28 bgs, California Commodities Corp, Djakarta
SESAME SEED—100 bgs, R J Spitz, San Juan del Sur
100 bgs, Ideal Trading Co, San Juan del Sur
200 bgs, Hismoco American Co, Corinto
75 bgs, W R Grace & Co, Corinto
250 bgs, Corinto
SODIUM ALGINATE—500 dms, Kelco Co, Glasgow
TAPIOCA FLOUR—3,136 bgs, Stein Hall & Co, Kohsichang
1,362 bgs, Geismar & Co, Kohsichang
1,116 bgs, Morningstar Paisley Inc, Kohsichang
VITAMIN-C—10 dms, Yokohama

Philadelphia

ARSENIC—61 bbls, Gothenburg
ASBESTOS FIBER—1,000 bgs, Davies Turner & Co, Durban
2,580 bgs, Chas Kurz & Co, Lourenco Marques
460 bgs, Lourenco Marques
130 bgs, Durban
BARIUM CHLORIDE—500 bgs, Antwerp
CADMIUM—50 cs, Antwerp
CALCIUM CARBONATE—1,600 bgs, Pluess Staufer, Antwerp
ETHYLBUTANOL—39 dms, Henley & Co, Hamburg
GRAPHITE—500 bgs, Asbury Graphite Mills, Kristiansund
250 bgs, Davies Turner & Co, Colombo
1,500 bgs, Asbury Graphite Mills, Tamatave
GYPSUM, CRUDE—11,333 tons, National Gypsum Co, Halifax
4,784 tons, U S Gypsum Co, Hantsport
MOLASSES—654,828 gals, S Western Sugar & Molasses Co, Rio Haina
224,384 gals, S Western Sugar & Molasses Co, San Pedro de Macoris
1,073,840 gals, S Western Sugar & Molasses Co, La Romana
SODIUM SILICOFLUORIDE—600 bgs, Riches Nelson, Rotterdam
VANILLA BEANS—6 cs, Zink & Trieste, Tamatave
73 cs, Tamatave
45 cs, Papeete

San Francisco

AGAR—3 bls, Wing Sing Chong Co, Kobe
ANTIMONY—20 cks, H M Newhall & Co, Manchester
CASEIN—200 bgs, First Spice Co, Amsterdam
CASSIA—83 bls, Imco Trading Co, Singapore
COPRA—500 tons, American Trust Co, Zamboanga
500 tons, Pacific Vegetable Oil Corp, Davao
500 tons, Cargill Inc, Davao
500 tons, Toftman Corp, Davao
500 tons, Borongan
FERROUS SULFATE—533 bgs, D M Hicks, Kobe
MACE—28 cs, California Commodities Corp, Singapore
PEPPER, BLACK—70 bgs, Ludwig Mueller, Singapore
PEPPER, RED—100 bgs, Deak & Co, Yokohama
SESAME SEED—50 bgs, Ideal Trading Co, San Juan del Sur
100 bgs, W R Grace & Co, Corinto
100 bgs, Hismoco American Co, Corinto
SHELLAC—50 bgs, H W Peabody & Co, Calcutta

Aliphatic Organics

—Continued from page 53

west coast states during the week ending May 5. Improvement in pasture conditions in much of the nation was reportedly one reason for the slow demand.

At New Orleans, Agricultural Marketing Service said, prices were unchanged to as much as ½ cent lower at mostly 12c. per gallon.

Oxalic Acid—The market situation for oxalic acid, traditionally one of the most static, is pretty much unchanged from last report. Requirements are said to be running into normal volume, prices, at long-established levels, firm and likely to remain so indefinitely.

Bag packaging which was introduced by a major producer of oxalic some months back appears to have met with wide acceptance among the consuming trade. Less costly and lighter than drums, bags afford considerable savings in freight, and, at the same time, minimize disposal problems.

One of several economy measures rediscovered during the recession when everyone suddenly became cost-conscious, bag packaging is being adopted wherever practicable, trade people say.

1,1,1-Trichloroethane—New and lower prices for 1,1,1-trichloroethane, a general purpose cleaning solvent, went into effect May 1. Dropped ½c. per pound across the board, schedule to consumers was established at 12¼c. per pound tankcars; at 12¾c., tankwagons (1,000 gallons minimum); at 13¼c., drum carlots; and at 16c. per pound for less carlot quantities, all on a delivered basis.

Prices to distributors are fractionally lower, naturally, with tankcars listed at 11.8c. per pound, tankwagons at 12.37c., and drum carlots at 12.85c. per pound. According to trade sources, distributors handle most of the consumer business, which is made up largely of less carlot orders.

Called an open-bucket or cold cleaning solvent, 1,1,1-trichloroethane enjoys an expanding market. Its low toxicity reportedly affords it a diverse list of end-users, and accounts, as well, for its domination of one-time carbon tetrachloride strongholds.

Imports are said to be no significant factor here, though foreign material has made markets for other chlorinated solvents increasingly competitive. And as trichloroethylene is used in vapor-degreasing, its end-use pattern is quite distinct from trichloroethane's applications, sources note, span.

Current Market Quotations

—Continued from page 35

Xylene, petroleum, indust., tanks, f.o.b. works:			
Bayonne, N. J.	gal.	.29	- —
Baytown, Tex.	gal.	.27	- —
Charleston, S. C.	gal.	.29	- —
Chicago, Ill.	gal.	.28½	- —
Detroit, Mich.	gal.	.28½	- —
Houston, Tex.	gal.	.27	- —
Philadelphia, Pa.	gal.	.29	- —
Providence, R. I.	gal.	.30	- —
Sewell's Point, Va.	gal.	.28	- —
Wood River, Ill.	lb.	.28½	- —
Xylenol, cryst., 45°-47° C., m.p., dms., l.c.l., works	lb.	.23	- —
56°-58° C., m.p., dms., l.c.l., works, frt. equald	lb.	.33	- —
60°-62° C., m.p., dms., l.c.l., same basis	lb.	.40	- —
Xylenol fraction, b.r. 7°-9° C., dry above 227° C., dms., c.l., same basis	gal.	1.25	- —
dms., l.c.l., same basis	gal.	1.30	- —
tanks, same basis	gal.	1.05	- —
Xylenol fraction, b.r. 7°-9° C., dry at or below 227° C., dms., c.l., same basis	gal.	1.35	- —
dms., l.c.l., same basis	gal.	1.40	- —
tanks, same basis	gal.	1.15	- —
2,4-Xylidine, tech., dms., frt. alld.	lb.	1.15	- —
2,5-Xylidine, tech., dms., frt. alld.	lb.	1.20	- —
Xylidines, mixed, o-m-p, dms., c.l., or t.l., works	lb.	.39	- —
dms., l.c.l., same basis	lb.	.40	- —
tanks, same basis	lb.	.38	- —

Xylol

Xylol quotations, both coaltar and petroleum, may be found under Xylene.

Y

Yara yara oil, cns.	lb.	2.15	- 3.05
Yeast, brewers, debittered, USP, Saccharomyces dlvd	lb.	.27	- —
Yeast, brewers, dry, USP, 50 Int'l B units per gram, 100-lb. dms	lb.	.47	- —
USP, 90 Int'l B units per gram, 100-lb dms.	lb.	.52	- —
USP, 200 Int'l B units per gram, 100-lb. dms	lb.	.56	- —
USP, 300 Int'l B units per gram, 100-lb. dms	lb.	.60	- —
Yohimbine hydrochloride, USP, dlvd	lb.	.18	- —

Yellow Pigments

Yellow pigment quotations are listed individually. For example, prices on Yellow, benzidine, may be found in the B's under Benzidine yellow.

Yerba santa leaves, bls.	lb.	.50	- .55
Ylang-ylang oil, Bourbon, bots	lb.	19.00	-25.00
extra, bots.	lb.	28.00	-31.00
Yohimbine hydrochloride, bots., tins.	oz.	3.75	- 4.25

Z

Zein, bgs., 36,000-lb. lots or more, bgs., 500-lb. lots or more, dlvd.	lb.	.343	- —
bgs., smaller lots, dlvd	lb.	.373	- —
Zinc acetate, NF, VIII, dms.	lb.	.53	- —
Tech., dms., l.t.l., works	lb.	.29¾	- —
Zinc borate, bgs., 1,000 lbs or more, works	lb.	.23	- —
bgs., less than 1,000 lbs., same basis	lb.	.25	- —
Zinc chloride, NF, gran., dms	lb.	.42	- —
NF, precip., powd., dms	lb.	.26	- —
Tech. soln., 50%, dms., c.l., works, 100 lbs.		5.80	- —
dms., l.c.l., works	100 lbs.	6.40	- —
tanks, works	100 lbs.	5.15	- —
Zinc chloride, tech., fused, dms., c.l., works	100 lbs.	10.70	- —
dms., l.c.l., works	100 lbs.	11.20	- —
gran., fib, dms., c.l., works, 100 lbs.		11.45	- —
fib. dms., l.c.l., works	100 lbs.	11.95	- —
Zinc chromate, bbls., dlvd.	lb.	.29	- —
Basic, bbls., dlvd.	lb.	.34	- —
Zinc cyanide, dms., 1,000-lb. lots or more, works	lb.	.55	- —
dms., smaller lots, works	lb.	.57	- —
Zinc dust, coml., bbls., c.l., works	lb.	.1460	- —
Pigment, bbls., c.l., works	lb.	.15	- —
bbls., l.c.l., works	lb.	.16	- —
Zinc fluoride, bbls., works	lb.	.49	- .50
Zinc hydrosulfite, dms., c.l., frt. alld	lb.	.21½	- —
dms., l.c.l., frt. alld.	lb.	.23½	- —
Zinc metal, prime western, slabs, E. St Louis	lb.	.11	- —
Prime western, slabs, New York.	lb.	.11½	- —
Zinc naphthenate, liq., 8% Zn., dms., frt. alld	lb.	.27	- —
10% Zn., dms., frt. alld	lb.	.33	- —
Zinc nitrate, tech., cryst., bbls., works	lb.	.20	- —
Zinc oxide pigment, American process, lead-free, bgs., c.l., frt. alld	lb.	.14½	- —
bgs., l.c.l., 10 tons or more, same basis	lb.	.15	- —
bgs., l.c.l., smaller lots, same basis	lb.	.15½	- —
leaded, 35%, bgs., c.l., mills, frt. alld	lb.	.15⅛	- —
bgs., l.c.l., 10 tons or more, same basis	lb.	.15⅝	- —
bgs., l.c.l., smaller lots, same basis	lb.	.16⅛	- —
leaded, 50%, bgs., c.l., same basis	lb.	.15⅜	- —
bgs., l.c.l., 10 tons or more, same basis	lb.	.15⅞	- —
bgs., l.c.l., smaller lots, same basis	lb.	.16⅜	- —
Zinc oxide pigment, French process, green seal, bgs., c.l., mills, frt. alld	lb.	.16¼	- —
bgs., l.c.l., 10 tons or more, same basis	lb.	.16¾	- —
bgs., l.c.l., smaller lots, same basis	lb.	.17¼	- —
red seal, bgs., c.l., same basis,	lb.	.15¾	- —
bgs., l.c.l., 10 tons or more, same basis	lb.	.16¼	- —
bgs., l.c.l., smaller lots, same basis	lb.	.16¾	- —
white seal, bgs., c.l., same basis	lb.	.16¾	- —
bgs., l.c.l., 10 tons or more, same basis	lb.	.17¼	- —
bgs., l.c.l., smaller lots, same basis	lb.	.17¾	- —
Zinc oxide, USP, dms., c.l., frt. alld.	lb.	.18¼	- —
dms., l.c.l., 10 tons or more, same basis	lb.	.18¾	- —
dms., l.c.l., smaller lots, same basis	lb.	.19¼	- —
Zinc phenolsulfonate, NF, gran., dms	lb.	.45	- .46
NF, powd., dms	lb.	.48	- .49
Zinc resinate, precip., 7.2-7.6% Zn., dms., frt. alld	lb.	.36¼	- —
Zinc silicofluoride, dms., works	lb.	.12½	- .14
Zinc stearate, tech., USP, ctns., c.l.,	lb.	.41	- —
ctns., l.c.l.	lb.	.42	- .46
Zinc sulfate, powd., monohydrate, 36% Zn., bgs., c.l., dlvd.	E 100 lbs.	8.75	- —
bgs., l.c.l., dlvd.	E 100 lbs.	9.75	- —
USP, gran., dms.	lb.	.26	- —
Zinc sulfate in bbls. 40c. higher.			
Zinc sulfide, pure, bgs., c.l., dlvd	lb.	.2530	- —
Zinc undecylenate, dms.	lb.	2.00	- —
Zinc yellow (see Zinc chromate).			
Zinc-ammonium chloride, bgs., c.l., works	100 lbs.	10.25	- —
bbls., c.l., works	100 lbs.	10.85	- —
bbls., l.c.l., works	100 lbs.	11.35	- —
Zinc-formaldenyde sulfoxylate, basic, 300-lb. dms., frt. alld	lb.	.26	- —
normal, 250-lb. dms., frt. alld	lb.	.52	- —
Zircon (G), gran., bgs., c.l., works.	lb.	.03⅛	- —
bgs., 5 tons to c.l., works	lb.	.03⅜	- —
bgs., 1 ton to 9,999-lb. lots, works.	lb.	.04	- —
bgs., smaller lots, works	lb.	.06½	- —
Zircon (G), milled, bgs. c.l., works.	lb.	.04⅛	- —
bgs., 5 tons to c.l., works	lb.	.04⅜	- —
bgs., 1 ton to 9,999-lb. lots, works	lb.	.04⅝	- —
bgs., 500-1,999-lb. lots, works	lb.	.07½	- —
Zircon (G) in barrels 1c. higher.			
Zirconium acetate, soln., 13% ZrO_2, dms., c.l., 30,000 lbs. min., works	lb.	.23	- —
Zirconium hydride, powd., electronic grade dms., works	lb.	14.00	-15.00
Zirconium oxide, CP, white, grd., bbls. or bgs., works	lb.	1.50	- —
Zirconium oxide, electric-fused, lump, bgs., 500 to 1,999-lb. lots, works	lb.	.45½	- —
bgs., smaller lots, works	lb.	.48	- —
milled, bgs., c.l., works	lb.	.59	- —
bgs., 5-ton lots, works	lb.	.59½	- —
bgs., 1-ton to 9,999-lb. lots, works	lb.	.60	- —
bgs., 500 to 1,999-lb. lots., works	lb.	.60½	- —
bgs., smaller lots, works	lb.	.63	- —
Glass polishing grade, 94-97% ZrO_2, bgs., works	lb.	.55	.65
Opacifier grade, 85-90% ZrO_2, bgs.,	lb.	.27	.50
Stabilized oxide, 91% ZrO_2, milled, bgs	lb.	.62	.85
Zirconium oxychloride, cryst., ctns., 5-ton lots, works	lb.	.35½	- —

Trade Name Chemicals

—Continued from page 45

found that at temperatures above 180° F., it is readily soluble in both aliphatic and aromatic hydrocarbons.

Thickening Agents

Thickening and suspending agents are materials added to various products to give viscosity control. These viscosity controlling agents are used in small amounts to increase the body of thin liquids. There are two types of viscosity controlling agents: those which give a permanent increase in body and those which are thixotropic, or give a false body. For example, a thixotropic paint formulation has a gel consistency when undisturbed, but flows readily when stirred up. After application a thixotropic paint quickly stiffens and has little tendency to drip, spill, or run.

Nuodex Products Company offers a line of viscosity control agents under the name **"Nuvis."** This line, which includes **"Nuvis 2," "HS,"** and **"LB,"** are thixotropic bodying agents. **"Nuvis 2"** is described by Nuodex as being the product recommended in the majority of instances.

At normal concentrations **"Nuvis 2,"** a powdered material, is suggested for use in paint systems to control flow, reduce sagging, ease brushing, control penetration and reduce pigment settling without otherwise affecting the film. Used in gloss enamels, semi-gloss enamels, and alkyd flat enamels, the product is said to work well in aliphatic solvents. For best results, Nuodex says that **"Nuvis 2"** should be incorporated into the paint as part of the pigment grind.

"Nuvis HS" is Nuodex's answer to high temperature operations where **"Nuvis 2"** cannot be used. **"Nuvis HS"** has many of the same properties as **"Nuvis 2"** including the fact that it comes in powdered form, it works best in aliphatic solvents, Also, it should be incorporated into the paint as part of the pigment grind.

Nuodex **"Nuvis LB"** is a liquid bodying agent designed to impart thixotropic viscosity characteristics to alkyd, oil, and oleo-resinous based paints. Due to its liquid form, **"Nuvis LB"** is described as being especially useful as a corrective agent for addition to finished paints. Nuodex states that the product may be used in all non-aqueous trade sales type finished. Like the other two **"Nuvis"** thixotropic bodying agents, **"Nuvis LB"** works best in aliphatic solvents.

Wyandotte Chemicals Corporation offers **"Carbose,"** its name for technical grade of sodium carboxymethylcellulose (sodium CMC). **"Carbose D"** and **"Carbose I"** are both of the low viscosity type, have a minimum sodium CMC content of 65 percent, and have a pH in a 0.25 percent aqueous solution at 25°C. of from 8 to 10. **"Carbose IM,"** an intermediate viscosity type, has the same minimum sodium CMC content and pH range as the above mentioned two products. Wyandotte's **"Carbose MX"** and **"VL"** are of a very low viscosity type.

Wyandotte recommends **"Carbose D"** for use in detergency promotion such as removal and suspension of soil usually encountered in household and commercial laundering. **"Carbose I"** is said to provide a water-solution material for thickening, suspending and stabilizing applications. It is also useful as an adhesive and binder.

"Carbose IM" is described as being used in applications which require a viscosity higher than that of **"Carbose I."** The most popular use of **"Carbose MX"** is as an oil well drilling fluid additive. Finally, **"Carbose VL"** is offered by Wyandotte for special applications where a thickening agent of exceptionally low viscosity type is desired.

Labor News Big

—Continued from page 5

crease of 5 percent for 2,900 production and maintenance employees. The rates now await ratification by union membership.

• Parke, Davis & Co., Detroit, Mich., and Local 11-176 of OCAW reached agreement Tuesday night (May 5) on a new three-year contract covering 1,650 hourly production employees. Within hours union members ratified the new pact at a special membership meeting.

• United States Rubber Company reached an agreement with the United Rubber, Cork, Linoleum and Plastic Workers Union. Highlights of the pact were an improved pension, insurance and severence pay agreement.

More labor news appears to be in the offing:

• Between May 15 and November 1, pacts end at fourteen plants of eleven phosphates producers.

• Two major contracts expire in June in the copper industry.

• There will be major contracts expiring in the aluminum industry in July.

Sun Purchase

—Continued from page 7

provisions of Delaware law. However, in an earlier hearing—before a court of chancery—the finding was that the transaction was one of purchase and sale and not a merger.

The supreme court, in upholding the decision of the Court of Chancery, said that it "did not see how any injury has been inflicted upon the Sun stockholders," as had been charged.

The Delaware court found that Sun "has simply acquired property and paid for it in shares of stock. The business of Sun will go on, as before, with additional assets."

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